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NEWS 1		Web Page for STN Seminar Schedule - N. America
NEWS 2	JUN 06	EPFULL enhanced with 260,000 English abstracts
NEWS 3	JUN 06	KOREAPAT updated with 41,000 documents
NEWS 4	JUN 13	USPATFULL and USPAT2 updated with 11-character patent numbers for U.S. applications
NEWS 5	JUN 19	CAS REGISTRY includes selected substances from web-based collections
NEWS 6	JUN 25	CA/CAplus and USPAT databases updated with IPC reclassification data
NEWS 7	JUN 30	AEROSPACE enhanced with more than 1 million U.S. patent records
NEWS 8	JUN 30	EMBASE, EMBAL, and LEMBASE updated with additional options to display authors and affiliated organizations
NEWS 9	JUN 30	STN on the Web enhanced with new STN AnaVist Assistant and BLAST plug-in
NEWS 10	JUN 30	STN AnaVist enhanced with database content from EPFULL
NEWS 11	JUL 28	CA/CAplus patent coverage enhanced
NEWS 12	JUL 28	EPFULL enhanced with additional legal status information from the epoline Register
NEWS 13	JUL 28	IFICDB, IFIPAT, and IFIUDB reloaded with enhancements
NEWS 14	JUL 28	STN Viewer performance improved
NEWS 15	AUG 01	INPADOCDB and INPAFAMDB coverage enhanced
NEWS 16	AUG 13	CA/CAplus enhanced with printed Chemical Abstracts page images from 1967-1998
NEWS 17	AUG 15	CAOLD to be discontinued on December 31, 2008
NEWS 18	AUG 15	CAplus currency for Korean patents enhanced
NEWS 19	AUG 27	CAS definition of basic patents expanded to ensure comprehensive access to substance and sequence information
NEWS 20	SEP 18	Support for STN Express, Versions 6.01 and earlier, to be discontinued
NEWS 21	SEP 25	CA/CAplus current-awareness alert options enhanced to accommodate supplemental CAS indexing of exemplified prophetic substances
NEWS 22	SEP 26	WPIDS, WPINDEX, and WPIX coverage of Chinese and and Korean patents enhanced
NEWS 23	SEP 29	IFICLS enhanced with new super search field
NEWS 24	SEP 29	EMBASE and EMBAL enhanced with new search and display fields
NEWS 25	SEP 30	CAS patent coverage enhanced to include exemplified

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                 prophetic substances identified in new Japanese-
                 language patents
 NEWS 26  OCT 07 EPFULL enhanced with full implementation of EPC2000
 NEWS 27  OCT 07 Multiple databases enhanced for more flexible patent
                 number searching
 NEWS 28  OCT 22 Current-awareness alert (SDI) setup and editing
                 enhanced
 NEWS 29  OCT 22 WPIDS, WPINDEX, and WPIX enhanced with Canadian PCT
                 Applications

 NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,
              AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

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 NEWS LOGIN    Welcome Banner and News Items
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FILE 'HOME' ENTERED AT 10:50:22 ON 23 OCT 2008

=> file reg
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.21       0.21

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DICTIONARY FILE UPDATES:  21 OCT 2008  HIGHEST RN 1064205-90-8

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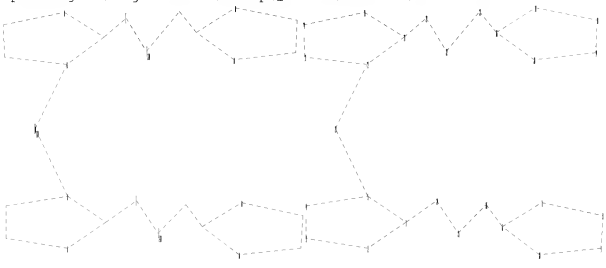
http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Program Files\Stnexp\Queries\10565592\Struc 1.str



chain nodes :
21 22 23 24 25 26 27
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
chain bonds :
1-24 5-27 6-26 11-21 12-27 16-23 21-22 22-23 24-25 25-26
ring bonds :
1-2 1-5 2-3 3-4 4-5 6-7 6-10 7-8 8-9 9-10 11-12 11-15 12-13 13-14
14-15 16-17 16-20 17-18 18-19 19-20
exact/norm bonds :
1-2 1-5 1-24 2-3 3-4 4-5 5-27 6-7 6-10 6-26 7-8 8-9 9-10 11-12 11-15
11-21 12-13 12-27 13-14 14-15 16-17 16-20 16-23 17-18 18-19 19-20 21-22
22-23 24-25 25-26

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom
20:Atom 21:CLASS 22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS

L1 STRUCTURE UPLOADED

=> d
L1 HAS NO ANSWERS

10565592.trn

L1 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

=> l1
STRUCTURE TOO LARGE - SEARCH ENDED
A structure in your query is too large. You may delete
attributes or atoms to reduce the size of the structure
and try again.

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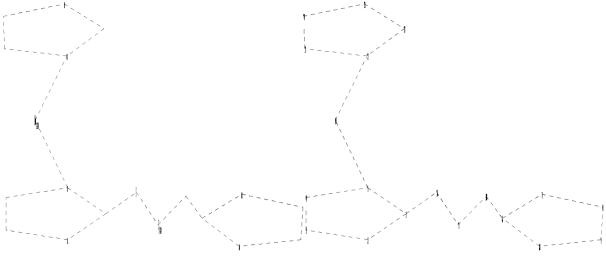

chain nodes :
16 17 18 19
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
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1-16 5-19 6-18 12-19 16-17 17-18
ring bonds :
1-2 1-5 2-3 3-4 4-5 6-7 6-10 7-8 8-9 9-10 11-12 11-15 12-13 13-14
14-15
exact/norm bonds :
1-2 1-5 1-16 2-3 3-4 4-5 5-19 6-7 6-10 6-18 7-8 8-9 9-10 11-12 11-15
12-13 12-19 13-14 14-15 16-17 17-18

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:CLASS 17:CLASS 18:CLASS 19:CLASS

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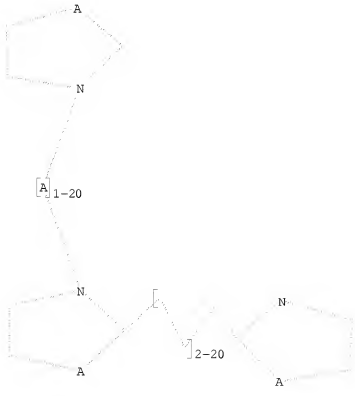
L2 HAS NO ANSWERS
L2 STR



Structure attributes must be viewed using STN Express query preparation.

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SAMPLE SCREEN SEARCH COMPLETED - 5718 TO ITERATE

35.0% PROCESSED 2000 ITERATIONS 5 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 109826 TO 118894
PROJECTED ANSWERS: 59 TO 511

L3 5 SEA SSS SAM L2

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=> 12 full
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FULL SCREEN SEARCH COMPLETED -   115863 TO ITERATE

100.0% PROCESSED   115863 ITERATIONS                              269 ANSWERS
SEARCH TIME: 00.00.03

L4          269 SEA SSS FUL L2

=> file caplus
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                   179.28     179.49

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FILE COVERS 1907 - 23 Oct 2008  VOL 149 ISS 17
FILE LAST UPDATED: 22 Oct 2008  (20081022/ED)

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=> 14
L5        1908 L4

=> d ibib abs hitstr 1900-1908

L5   ANSWER 1900 OF 1908  CAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:        1995:856018  CAPLUS
DOCUMENT NUMBER:         123:245790
ORIGINAL REFERENCE NO.:  123:43603a
TITLE:                   Polymethylene compounds for high sensitive
                         determination of amino-containing substances
INVENTOR(S):             Ishiguro, Norihiko; Kitayama, Ryuichi; Kawaguchi,
                         Seiji; Hashimoto, Yoshimi
PATENT ASSIGNEE(S):      Bio Sensor Kenkyusho KK, Japan
SOURCE:                  Jpn. Kokai Tokkyo Koho, 10 pp.
                         CODEN: JKXXAF
```

DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07145148	A	19950606	JP 1992-141469	19920602

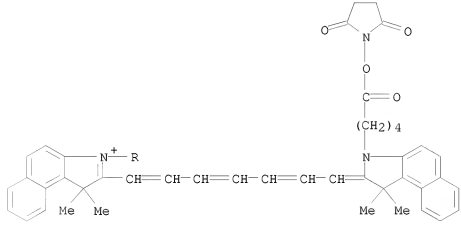
PRIORITY APPLN. INFO.: JP 1992-141469 19920602

AB The title determination is based on the reaction of the polymethylene compds. with the anal. substances followed by the near-IR absorption or fluorescence measurement of the reaction products.

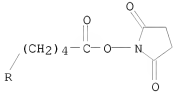
IT 168969-46-8P 168969-47-9P 168969-48-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(polymethylene compds. for high sensitive determination of amino-containing substances)

RN 168969-46-8 CAPLUS
CN 1H-Benz[e]indolium, 3-[5-[(2,5-dioxo-1-pyrrolidinyl)oxy]-5-oxopentyl]-2-[7-[3-[5-[(2,5-dioxo-1-pyrrolidinyl)oxy]-5-oxopentyl]-1,3-dihydro-1,1-dimethyl-2H-benz[e]indol-2-ylidene]-1,3,5-heptatrien-1-yl]-1,1-dimethyl- (CA INDEX NAME)

PAGE 1-A

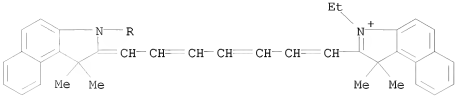


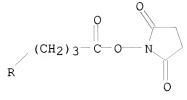
PAGE 2-A



RN 168969-47-9 CAPLUS
CN 1H-Benz[e]indolium, 2-[7-[3-[4-[(2,5-dioxo-1-pyrrolidinyl)oxy]-4-oxobutyl]-

1,3-dihydro-1,1-dimethyl-2H-benz[e]indol-2-ylidene]-1,3,5-heptatrien-1-yl]-3-ethyl-1,1-dimethyl- (CA INDEX NAME)





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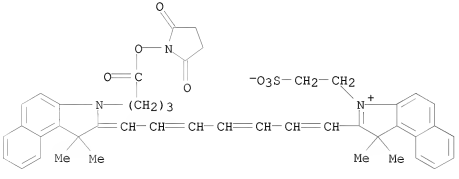
CN 1H-Benz[e]indolium, 2-[7-[3-[4-[(2,5-dioxo-1-pyrrolidinyl)oxy]-4-oxobutyl]-1,3-dihydro-1,1-dimethyl-2H-benz[e]indol-2-ylidene]-1,3,5-heptatrien-1-yl]-1,1-dimethyl-3-(2-sulfoethyl)-, inner salt (CA INDEX NAME)



L5 ANSWER 1901 OF 1908 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1995:667305 CAPLUS
DOCUMENT NUMBER: 123:138173
ORIGINAL REFERENCE NO.: 123:24473a,24476a
TITLE: Azulenium dye as label for hybridization analysis of nucleic acid
INVENTOR(S): Okamoto, Hisashi; Myazaki, Takeshi
PATENT ASSIGNEE(S): Canon Kk, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 27 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07103983	A	19950421	JP 1993-248211	19931004
JP 3368011	B2	20030120		
US 5679516	A	19971021	US 1994-317872	19941004

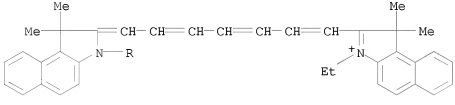
PRIORITY APPLN. INFO.: JP 1993-248211 A 19931004
OTHER SOURCE(S): MARPAT 123:138173

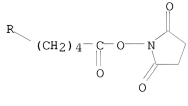
AB Disclosed is a method comprising hybridization of target DNA with labeled probe, removal of free labeled probe by capillary electrophoresis, and determination of labeled probe-target DNA hybrid. The probe is labeled with azulenium-based fluorescent dye, and the method is used for determination DNA or RNA of microorganism, animal, plant, or human. In example, a cyanine dye was esterified with succinimidyl, deoxyutiuridylated, conjugated with oligonucleotide, and used as labeled probe for determining M13mp18ssDNA.

IT 164791-45-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(azulenium dye as label for hybridization anal. of nucleic acid)

RN 164791-45-1 CAPLUS

CN 1H-Benz[e]indolium, 2-[7-[3-[5-[(2,5-dioxo-1-pyrrolidinyl)oxy]-5-oxopentyl]-1,3-dihydro-1,1-dimethyl-2H-benz[e]indol-2-ylidene]-1,3,5-heptatrien-1-yl]-3-ethyl-1,1-dimethyl-, iodide (1:1) (CA INDEX NAME)





● I^-

L5 ANSWER 1902 OF 1908 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:641914 CAPLUS
DOCUMENT NUMBER: 123:51473
ORIGINAL REFERENCE NO.: 123:9159a,9162a
TITLE: A comparison of three fluorophores for use in an optical biosensor for the measurement of prostate-specific antigen in whole blood

AUTHOR(S): Daniels, P. B.; Fletcher, J. E.; O'Neill, P. M.; Stafford, C. G.; Bacarese-Hamilton, T.; Robinson, G. A.
CORPORATE SOURCE: SCL Bioscience Services Ltd., Surrey, GU21 5JY, UK
SOURCE: Sensors and Actuators, B: Chemical (1995), B27(1-3), 447-51
CODEN: SABCEB; ISSN: 0925-4005
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

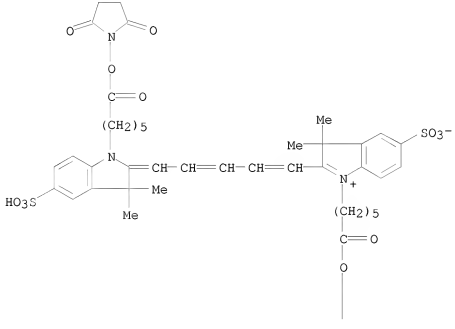
AB To obtain maximum anal. performance from an optical immunosensor which uses whole blood as the sample matrix, rigorous selection of the fluorophore and the associated optical filtration is required. Three fluorophores, allophycocyanin (APC), carboxymethylindocyanine succinimidyl ester (C45) and fluorescein isothiocyanate (FITC), were evaluated in whole blood and serum assays using the fluorescence capillary fill device immunosensor. APC gave the best anal. performance. Whole-blood patient samples were assayed using APC as the label and an excellent correlation was obtained with a com. available immunoassay.

IT 146368-15-2
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(comparison of 3 fluorophores for optical immunosensor for blood prostate-specific antigen determination)

RN 146368-15-2 CAPLUS

CN 3H-Indolium, 1-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-2-[5-[1-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-pentadien-1-yl]-3,3-dimethyl-5-sulfo-, inner salt (CA INDEX NAME)

PAGE 1-A



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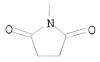
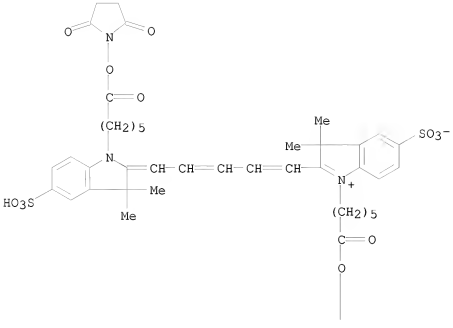


L5 ANSWER 1903 OF 1908 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1995:549496 CAPLUS
DOCUMENT NUMBER: 122:286076
ORIGINAL REFERENCE NO.: 122:52027a,52030a
TITLE: method and device for fluorescence immunoassay
INVENTOR(S): Yoshida, Masakazu
PATENT ASSIGNEE(S): Daikin Ind Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07063756	A	19950310	JP 1993-211628	19930826
JP 3362206	B2	20030107		
PRIORITY APPLN. INFO.:			JP 1993-211628	19930826

AB A procedure for fluorescence immunoassay involves: immobilization of antibody on a slab-type photoconductive wave path made of synthetic resins, reaction with test antigen, reaction with cyanin compound (maximum fluorescence peak = 650nm)-labeled antibody, introduction of 635-nm excited light to the path, excitation of the cyanin compound with evenescent wave component, and measurement. An apparatus for the fluorescence immunoassay is described.
IT 146368-15-2
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(method and device for fluorescence immunoassay)
RN 146368-15-2 CAPLUS
CN 3H-Indolium, 1-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-2-[5-[1-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-pentadien-1-yl]-3,3-dimethyl-5-sulfo-, inner salt (CA INDEX NAME)

PAGE 1-A



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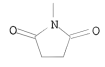
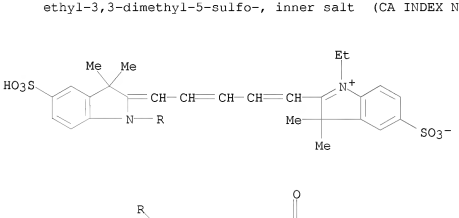


L5 ANSWER 1904 OF 1908 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1995:520664 CAPLUS
DOCUMENT NUMBER: 123:275097
ORIGINAL REFERENCE NO.: 123:48882h,48883a
TITLE: Visible Diode Laser-Induced Fluorescence Detection in Liquid Chromatography after Precolumn Derivatization of Amines
AUTHOR(S): Mank, A. J. G.; van der Laan, H. T. C.; Lingeman, H.; Gooijer, C.; Brinkman, U. A. Th.; Velthorst, N. H.
CORPORATE SOURCE: Department of General and Analytical Chemistry, Free University, Amsterdam, 1081 HV, Neth.
SOURCE: Analytical Chemistry (1995), 67(10), 1742-8
CODEN: ANCHAM; ISSN: 0003-2700
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB To fully exploit the attractive visible diode laser-induced fluorescence (LIF) detection technique in column liquid chromatog. (LC), covalent labeling procedures need to be developed which are compatible with near-IR

fluorescence. For this purpose, several red-absorbing labels containing a single succinimidyl ester functionality were synthesized and used for the derivatization of primary and secondary amines. Oxazines/thiazines, squaraines, and dicarbocyanines were examined as red-absorbing fluorophores. The quality of the LC-diode LIF system for the analytes concerned is illustrated by the concentration detection limit of the labeled n-octalyamine (a test compound), which was as low as 2 + 10-12 M. As expected in view of the limited reactivity of the succinimidyl ester group, the analyte concns. required to obtain quant. reaction with the label were equal to or higher than 2 + 10-8 M. To show the applicability of the method to biol. samples, urine was spiked with 5 + 10-7 M 1-adamantanamine, extracted, derivatized with a dicarbocyanine-based label, and analyzed by LC-diode LIF.

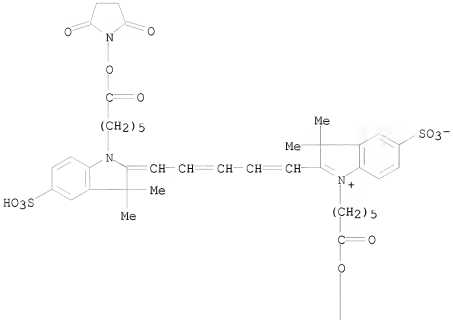
IT 146368-14-1 146368-15-2
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(in derivatization of amines for diode laser-induced fluorescence detection)

RN 146368-14-1 CAPLUS
CN 3H-Indolium, 2-[5-[1-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-pentadien-1-yl]-1-ethyl-3,3-dimethyl-5-sulfo-, inner salt (CA INDEX NAME)

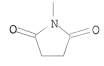


RN 146368-15-2 CAPLUS
CN 3H-Indolium, 1-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-2-[5-[1-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-pentadien-1-yl]-3,3-dimethyl-5-sulfo-, inner salt (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



L5 ANSWER 1905 OF 1908 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1995:378297 CAPLUS
DOCUMENT NUMBER: 122:182257
ORIGINAL REFERENCE NO.: 122:33288h,33289a
TITLE: Use of cyanine dyes with evanescent wave fiber optic biosensors
AUTHOR(S): Tempelman, Linda A.; Golden, Joel P.; Anderson, George P.; Ligler, Frances S.
CORPORATE SOURCE: Center for Bio/Molecular Science and Engineering, Naval Research Laboratory, Washington, DC, 20375-5348, USA
SOURCE: Proceedings of SPIE-The International Society for Optical Engineering (1994), 2293(Chemical, Biochemical, and Environmental Fiber Sensors VI), 139-48
CODEN: PSISDG; ISSN: 0277-786X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Cyanine fluorescent dyes which can be coupled to proteins have recently

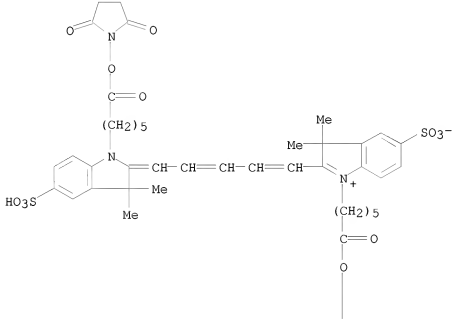
become available. They are excited in the 500-800 nm range and have large extinction coeffs. which make them good candidates for sensitive immunosensor applications. We evaluated three of these dyes (Cy3, Cy5, and Cy5.5) in a direct fluoroimmunoassay on evanescent wave fiber optic biosensors. The biosensors differed in laser excitation sources and emission filters in order to accommodate dye requirements. The assay consisted of rabbit anti-goat IgG immobilized fiber probes being exposed to fluorophore-labeled goat IgG (gIgG). Upon binding of the dye-conjugated protein to the fiber, a signal was generated. When using the 514 nm laser device, Cy3-gIgG gave a substantially larger signal than TRITC-gIgG. On the 650 nm laser device, Cy5-gIgG provided very good signal, while that for Cy5.5 was moderate. Cy5.5 produced an excellent response on the 670 nm laser device. Use of these dyes provides a mechanism for improving the fiber optic biosensor by changing the excitation/emission to a region of low background for clin. and environmental samples.

IT 146368-15-2 161582-25-8
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(use of cyanine dyes with evanescent wave fiber optic biosensors)

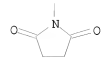
RN 146368-15-2 CAPLUS

CN 3H-Indolium, 1-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-2-[5-[1-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-pentadien-1-yl]-3,3-dimethyl-5-sulfo-, inner salt (CA INDEX NAME)

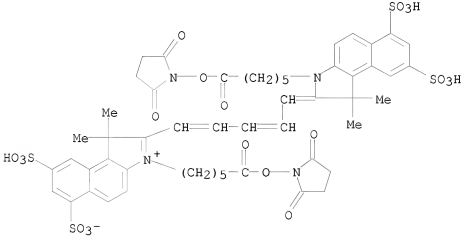
PAGE 1-A



PAGE 2-A



RN 161582-25-8 CAPLUS
CN 1H-Benz[e]indolium, 3-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-2-[5-[3-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-1,3-dihydro-1,1-dimethyl-6,8-disulfo-2H-benz[e]indol-2-ylidene]-1,3-pentadien-1-yl]-1,1-dimethyl-6,8-disulfo-, inner salt (CA INDEX NAME)



L5 ANSWER 1906 OF 1908 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1994:100928 CAPLUS
DOCUMENT NUMBER: 120:100928
ORIGINAL REFERENCE NO.: 120:17759a,17762a
TITLE: A novel fluorescence ratiometric method confirms the low solvent viscosity of the cytoplasm
AUTHOR(S): Luby-Phelps, Katherine; Mujumdar, Swati; Mujumdar, Ratnakar B.; Ernst, Lauren A.; Galbraith, William; Waggoner, Alan S.
CORPORATE SOURCE: Southwest. Med. Cent., Univ. Texas, Dallas, TX, 75235-9040, USA
SOURCE: Biophysical Journal (1993), 65(1), 236-42
CODEN: BIOJAU; ISSN: 0006-3495
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Two homologous indocyanine dyes, Cy3.18 and Cy5.18, can be used as a ratio pair for fluorometric determination of solvent viscosity. Succinimidyl ester derivs. of these dyes can be attached to inert carrier macromols., such as Ficoll 70, for measurement of intracellular or intravesicular solvent viscosity. When the viscosity of the solvent was varied by various methods, the fluorescence intensity ratio (Cy3/Cy5) in a mixture of Cy3.18-Ficoll 70 (Cy3F70) and Cy5.18-Ficoll 70 (Cy5F70) in solution was found

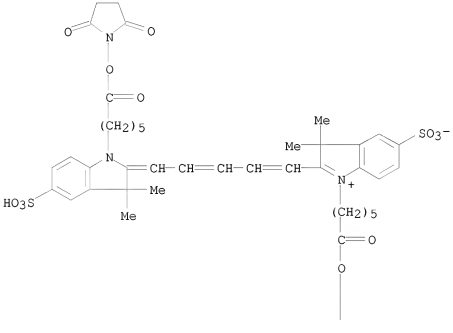
to be solely a function of solvent viscosity and was insensitive to other solvent parameters such as dielec. constant, temperature, and the ability of the solvent to form hydrogen bonds. Most important, it was insensitive to the presence of large macromols., such as proteins, which increase the shear viscosity but have little effect on solvent viscosity. Following microinjection into the cytoplasm of living tissue culture cells, no binding of Cy3F70 or Cy5F70 to intracellular components was detected by fluorescence recovery after photobleaching. Fluorescence intensity ratio imaging of Cy3F70 and Cy5F70 in nonmotile interphase CV1 and PtK1 cells showed that the solvent viscosity of cytoplasm was not significantly different from water and showed no spatial variation.

IT 146368-15-2D, conjugates with Ficoll 70
RL: ANST (Analytical study)
(in fluorescence ratiometric method for determining solvent viscosity of cytoplasm)

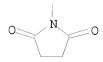
RN 146368-15-2 CAPLUS

CN 3H-Indolium, 1-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-2-[5-[1-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-pentadien-1-yl]-3,3-dimethyl-5-sulfo-, inner salt (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



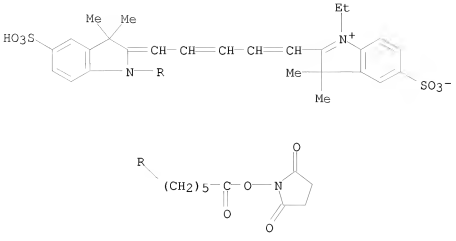
L5 ANSWER 1907 OF 1908 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1993:142766 CAPLUS
DOCUMENT NUMBER: 118:142766
ORIGINAL REFERENCE NO.: 118:24455a,24458a
TITLE: Cyanine dye labeling reagents: Sulfoindocyanine succinimidyl esters
AUTHOR(S): Mujumdar, Ratnakar B.; Ernst, Lauren A.; Mujumdar, Swati R.; Lewis, Christopher J.; Waggoner, Alan S.
CORPORATE SOURCE: Dep. Biol. Sci., Carnegie Mellon Univ., Pittsburgh, PA, 15213, USA
SOURCE: Bioconjugate Chemistry (1993), 4(2), 105-11
CODEN: BCCHES; ISSN: 1043-1802
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The synthesis and properties of a series of new fluorescent labeling reagents based on sulfoindocyanine dyes are described. They contain succinimidyl ester reactive groups and can be readily conjugated to antibodies, avidin, DNA, lipids, polymers, and other amino-group-containing materials. The labeling reagents are water soluble, pH insensitive, and show much reduced dye aggregation under labeling conditions. One of the reagents, Cy3, can be excited with the 488-, 514-, and 532-nm laser lines and is optimally excited with the 546-nm mercury arc line. Another, Cy5, can be excited with the 633-nm HeNe and 647-nm Kr laser lines available with many flow cytometers and confocal laser-scanning microscopes. New laser diodes emitting near 650 nm should also be excellent excitation sources for Cy5.

IT 146368-14-1 146368-15-2
RL: ANST (Analytical study)
(as cyanine dye labeling reagent for biochem.)

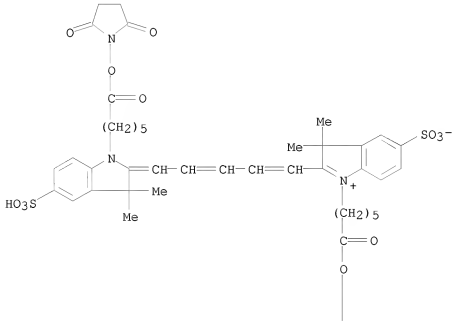
RN 146368-14-1 CAPLUS

CN 3H-Indolium, 2-[5-[1-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-pentadien-1-yl]-1-ethyl-3,3-dimethyl-5-sulfo-, inner salt (CA INDEX NAME)

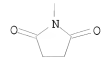


RN 146368-15-2 CAPLUS
CN 3H-Indolium, 1-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-2-[5-[1-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-pentadien-1-yl]-3,3-dimethyl-5-sulfo-, inner salt (CA INDEX NAME)

PAGE 1-A



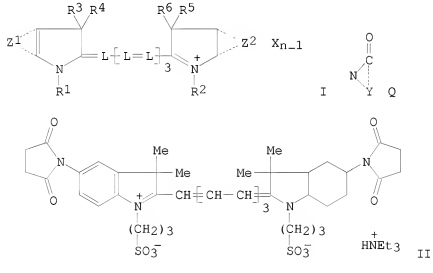
PAGE 2-A



L5 ANSWER 1908 OF 1908 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1990:169019 CAPLUS
DOCUMENT NUMBER: 112:169019
ORIGINAL REFERENCE NO.: 112:28355a,28358a
TITLE: Silver halide photographic material having pyrrolyl-containing halation- and irradiation-inhibiting dye
INVENTOR(S): Ohashi, Minoru; Horii, Matsuichi
PATENT ASSIGNEE(S): Mitsubishi Paper Mills, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01239548	A	19890925	JP 1988-68453	19880322

PRIORITY APPLN. INFO.: JP 1988-68453 19880322
GI



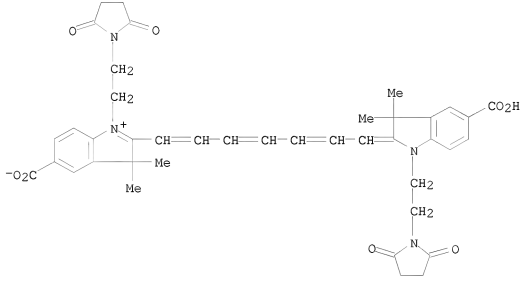
AB The title material has a hydrophilic colloidal layer containing ≥1 pyrrole dye I [R1-2 = (substituted) alkyl; Z1-2 = nonmetal atomic group

forming substituted benzo or naphtho condensed ring; R1-2 and Z1-2 permit the dye to have ≥1 cyclic imide group Q; R3-6 = (substituted) alkyl; L = (substituted) methine; Y = nonmetal atomic group forming cyclic imide; n = 1, 2; n = 1 when the dye forms an intramol. salt]. The dye shows reduced discoloration in storage. Thus, a photog. film having a backing coating comprising a hydrophilic colloidal layer containing gelatine and pyrrole dye II, which is laminated with an AgBr emulsion layer, was exposed, developed, and fixed to give an image showing halation-inhibiting effect.

IT 126169-21-9 126169-26-4
RL: USES (Uses)
(halation and irradiation inhibitor, for silver halide photog. emulsion material, with storage stability)

RN 126169-21-9 CAPLUS
CN 3H-Indolium, 5-carboxy-2-[7-[5-carboxy-1-[2-(2,5-dioxo-1-pyrrolidinyl)ethyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3,5-heptatrien-1-yl]-1-[2-(2,5-dioxo-1-pyrrolidinyl)ethyl]-3,3-dimethyl-, inner salt, potassium salt (1:1) (CA INDEX NAME)

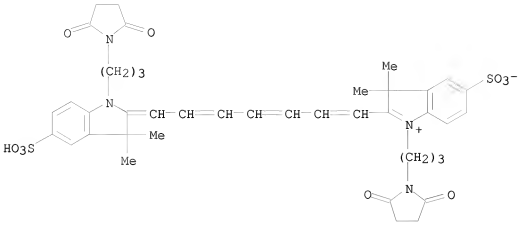
PAGE 1-A



PAGE 2-A

● K

RN 126169-26-4 CAPLUS
CN 3H-Indolium, 1-[3-(2,5-dioxo-1-pyrrolidinyl)propyl]-2-[7-[1-[3-(2,5-dioxo-1-pyrrolidinyl)propyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3,5-heptatrien-1-yl]-3,3-dimethyl-5-sulfo-, inner salt, potassium salt (1:1) (CA INDEX NAME)

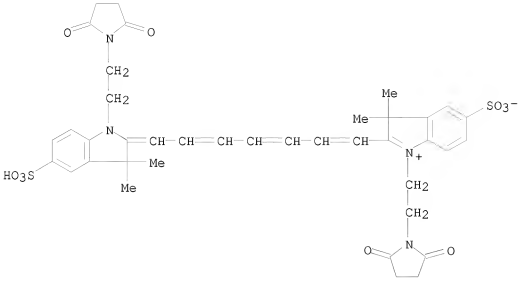


● K

IT 126169-23-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and use of, as halation and irradiation inhibitor, for silver halide photog. emulsion material, with storage stability)
RN 126169-23-1 CAPLUS
CN 3H-Indolium, 1-[2-(2,5-dioxo-1-pyrrolidinyl)ethyl]-2-[7-[1-[2-(2,5-dioxo-1-pyrrolidinyl)ethyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3,5-heptatrien-1-yl]-3,3-dimethyl-5-sulfo-, inner salt, compd. with N,N-diethylethanamine (1:1) (CA INDEX NAME)

CM 1

CRN 126169-22-0
CMF C39 H42 N4 O10 S2



CM 2

CRN 121-44-8
CMF C6 H15 N

=> file reg
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 50.01 229.50

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE ENTRY TOTAL SESSION
CA SUBSCRIBER PRICE -7.20 -7.20

FILE 'REGISTRY' ENTERED AT 10:54:04 ON 23 OCT 2008
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provided by InfoChem.

STRUCTURE FILE UPDATES: 21 OCT 2008 HIGHEST RN 1064205-90-8
DICTIONARY FILE UPDATES: 21 OCT 2008 HIGHEST RN 1064205-90-8

New CAS Information Use Policies, enter HELP USAGETERMS for details.

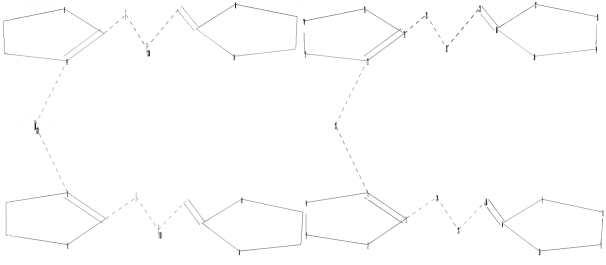
TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Program Files\Stnexp\Queries\10565592\Struc 3.str



chain nodes :
21 22 23 24 25 26 27
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
chain bonds :
1-24 5-27 6-26 11-21 12-27 16-23 21-22 22-23 24-25 25-26
ring bonds :
1-2 1-5 2-3 3-4 4-5 6-7 6-10 7-8 8-9 9-10 11-12 11-15 12-13 13-14
14-15 16-17 16-20 17-18 18-19 19-20
exact/norm bonds :
1-2 1-5 1-24 2-3 3-4 4-5 5-27 6-7 6-10 7-8 8-9 9-10 11-12 11-15 11-21
 12-13 12-27 13-14 14-15 16-17 16-20 17-18 18-19 19-20 21-22 22-23 24-25
 25-26
exact bonds :
6-26 16-23

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom
20:Atom 21:CLASS 22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS

L6 STRUCTURE UPLOADED

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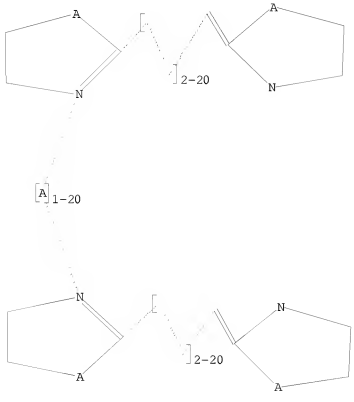
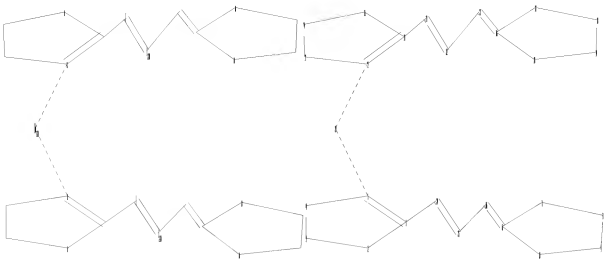
L6 HAS NO ANSWERS
L6 STR



Structure attributes must be viewed using STN Express query preparation.

=> 16
STRUCTURE TOO LARGE - SEARCH ENDED
A structure in your query is too large. You may delete
attributes or atoms to reduce the size of the structure
and try again.

=>
Uploading C:\Program Files\Stnexp\Queries\10565592\Struc 4.str



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21  22  23  24  25  26  27
ring nodes :
1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  16  17  18  19  20
chain bonds :
1-24  5-27  6-26  11-21  12-27  16-23  21-22  22-23  24-25  25-26
ring bonds :
1-2  1-5  2-3  3-4  4-5  6-7  6-10  7-8  8-9  9-10  11-12  11-15  12-13  13-14
14-15  16-17  16-20  17-18  18-19  19-20
exact/norm bonds :
1-2  1-5  2-3  3-4  4-5  5-27  6-7  6-10  7-8  8-9  9-10  11-12  11-15  12-13
12-27  13-14  14-15  16-17  16-20  17-18  18-19  19-20
exact bonds :
1-24  6-26  11-21  16-23  21-22  22-23  24-25  25-26


Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:Atom  8:Atom  9:Atom  10:Atom
11:Atom  12:Atom  13:Atom  14:Atom  15:Atom  16:Atom  17:Atom  18:Atom  19:Atom
20:Atom  21:CLASS  22:CLASS  23:CLASS  24:CLASS  25:CLASS  26:CLASS  27:CLASS



L7      STRUCTURE UPLOADED

=> d
L7 HAS NO ANSWERS
L7              STR
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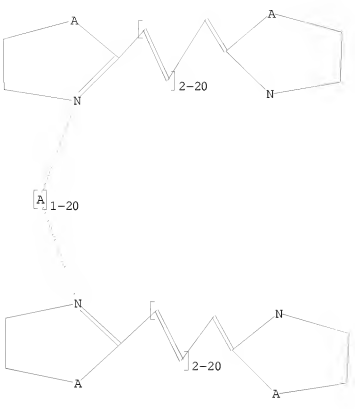
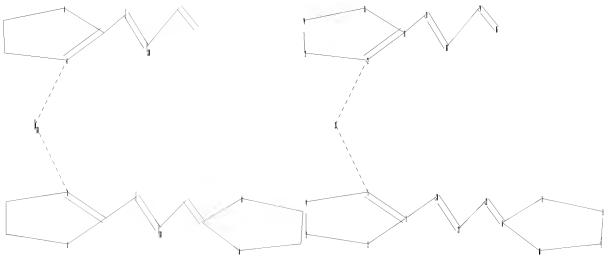


Structure attributes must be viewed using STN Express query preparation.

=> 18
L8 NOT FOUND
The L-number entered has not been defined in this session, or it
has been deleted. To see the L-numbers currently defined in this
session, enter DISPLAY HISTORY at an arrow prompt (=>).

=> 17
STRUCTURE TOO LARGE - SEARCH ENDED
A structure in your query is too large. You may delete
attributes or atoms to reduce the size of the structure
and try again.

=>
Uploading C:\Program Files\Stnexp\Queries\10565592\Struc 5.str



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17  18  19  20  21  22  23
ring nodes :
1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  16
chain bonds :
1-20  5-23  6-22  11-17  12-23  16-19  17-18  18-19  20-21  21-22
ring bonds :
1-2  1-5  2-3  3-4  4-5  6-7  6-10  7-8  8-9  9-10  11-12  11-15  12-13  13-14
14-15
exact/norm bonds :
1-2  1-5  2-3  3-4  4-5  5-23  6-7  6-10  7-8  8-9  9-10  11-12  11-15  12-13
12-23  13-14  14-15
exact bonds :
1-20  6-22  11-17  16-19  17-18  18-19  20-21  21-22


Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:Atom  8:Atom  9:Atom  10:Atom
11:Atom  12:Atom  13:Atom  14:Atom  15:Atom  16:Atom  17:CLASS  18:CLASS  19:CLASS
20:CLASS  21:CLASS  22:CLASS  23:CLASS



L8      STRUCTURE UPLOADED

=> d
L8 HAS NO ANSWERS
L8              STR
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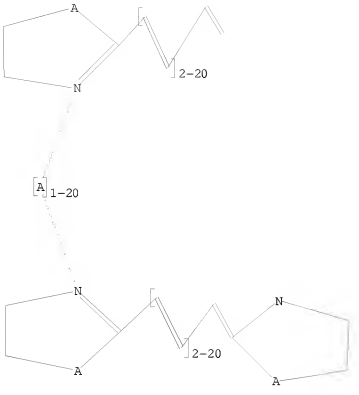
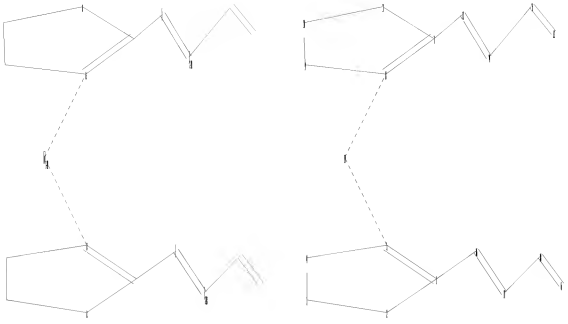


Structure attributes must be viewed using STN Express query preparation.

=> 18
STRUCTURE TOO LARGE - SEARCH ENDED
A structure in your query is too large. You may delete
attributes or atoms to reduce the size of the structure
and try again.

=>
Uploading C:\Program Files\Stnexp\Queries\10565592\Struc 6.str



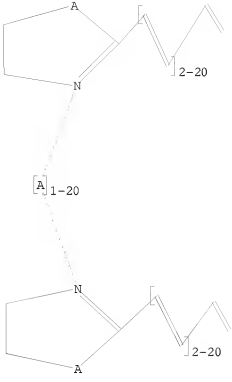
```
chain nodes :
13  14  15  16  17  18  19
ring nodes :
1  2  3  4  5  6  7  8  9  10  11  12
chain bonds :
1-16  5-19  6-18  7-13  8-19  12-15  13-14  14-15  16-17  17-18
ring bonds :
1-2  1-5  2-3  3-4  4-5  7-8  7-11  8-9  9-10  10-11
exact/norm bonds :
1-2  1-5  2-3  3-4  4-5  5-19  7-8  7-11  8-9  8-19  9-10  10-11
exact bonds :
1-16  6-18  7-13  12-15  13-14  14-15  16-17  17-18


Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:Atom  8:Atom  9:Atom  10:Atom
11:Atom  12:Atom  13:CLASS  14:CLASS  15:CLASS  16:CLASS  17:CLASS  18:CLASS
19:CLASS



L9      STRUCTURE UPLOADED

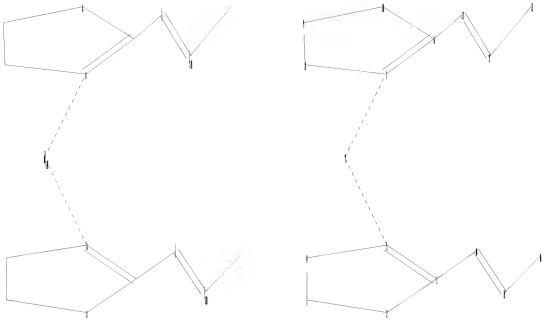
=> d
L9 HAS NO ANSWERS
L9              STR
```



Structure attributes must be viewed using STN Express query preparation.

=> 19
STRUCTURE TOO LARGE - SEARCH ENDED
A structure in your query is too large. You may delete
attributes or atoms to reduce the size of the structure
and try again.

=>
Uploading C:\Program Files\Stnexp\Queries\10565592\Struc 7.str



```
chain nodes :
11  12  13  14  15  16  17
ring nodes :
1  2  3  4  5  6  7  8  9  10
chain bonds :
1-14  5-17  6-11  7-17  11-12  12-13  14-15  15-16
ring bonds :
1-2  1-5  2-3  3-4  4-5  6-7  6-10  7-8  8-9  9-10
exact/norm bonds :
1-2  1-5  2-3  3-4  4-5  5-17  6-7  6-10  7-8  7-17  8-9  9-10
exact bonds :
1-14  6-11  11-12  12-13  14-15  15-16


Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:Atom  8:Atom  9:Atom  10:Atom
11:CLASS  12:CLASS  13:CLASS  14:CLASS  15:CLASS  16:CLASS  17:CLASS



L10     STRUCTURE UPLOADED

=> dd
L11       2638 DD

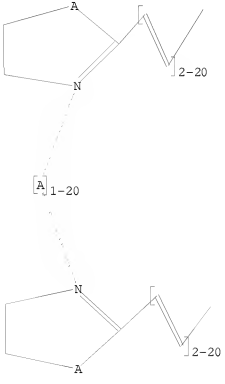
=> d

L11  ANSWER 1 OF 2638  REGISTRY  COPYRIGHT 2008 ACS on STN
RN   1051864-77-7  REGISTRY
ED   Entered STN:  23 Sep 2008
CN   DD 4280  (CA INDEX NAME)
```

```
ENTE Described as a cationic property-deactivated liquid cation starch (Seiko
     PMC Corp.)
MF   Unspecified
CI   PMS, MAN
PCT  Manual registration
SR   CA
LC   STN Files:   CA, CAPLUS, USPATFULL

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
               2 REFERENCES IN FILE CA (1907 TO DATE)
               2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

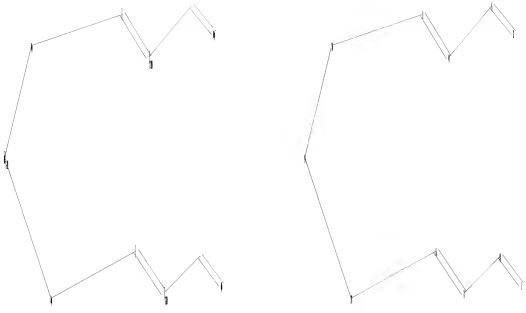

=> d l10
L10 HAS NO ANSWERS
L10              STR
```




```
Structure attributes must be viewed using STN Express query preparation.


=> l10
STRUCTURE TOO LARGE - SEARCH ENDED
A structure in your query is too large.  You may delete
attributes or atoms to reduce the size of the structure
and try again.

=>
Uploading C:\Program Files\Stnexp\Queries\10565592\Struc 8.str
```

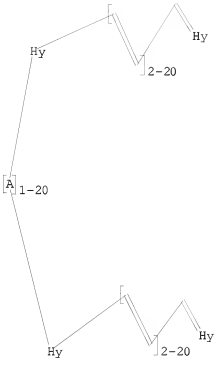


chain nodes :
1 2 3 4 5 6 7 8 9 16 17
chain bonds :
1-8 2-5 3-4 3-16 4-5 6-7 6-17 7-8 9-16 9-17
exact/norm bonds :
1-8 2-5 3-16 6-17 9-16 9-17
exact bonds :
3-4 4-5 6-7 7-8

Match level :
1:Atom 2:Atom 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS
16:Atom 17:Atom

L12 STRUCTURE UPLOADED

=> d
L12 HAS NO ANSWERS
L12 STR



Structure attributes must be viewed using STN Express query preparation.

=> 112
STRUCTURE TOO LARGE - SEARCH ENDED
A structure in your query is too large. You may delete
attributes or atoms to reduce the size of the structure
and try again.

=> log h

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	15.89	245.39
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-7.20

SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 11:05:43 ON 23 OCT 2008

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

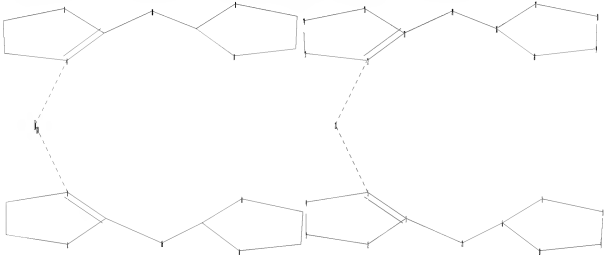
LOGINID:SSPTAJRK1626

PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'REGISTRY' AT 11:08:01 ON 23 OCT 2008
FILE 'REGISTRY' ENTERED AT 11:08:01 ON 23 OCT 2008

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	16.35	245.85

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-7.20

=>
Uploading C:\Program Files\Stnexp\Queries\10565592\Struc 9.str

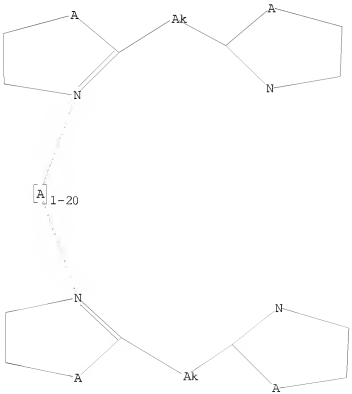


chain nodes :
21 24 25
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
chain bonds :
1-25 5-21 6-25 11-24 12-21 16-24
ring bonds :
1-2 1-5 2-3 3-4 4-5 6-7 6-10 7-8 8-9 9-10 11-12 11-15 12-13 13-14
14-15 16-17 16-20 17-18 18-19 19-20
exact/norm bonds :
1-2 1-5 1-25 2-3 3-4 4-5 5-21 6-7 6-10 6-25 7-8 8-9 9-10 11-12 11-15
11-24 12-13 12-21 13-14 14-15 16-17 16-20 16-24 17-18 18-19 19-20

```
Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:Atom  8:Atom  9:Atom  10:Atom
11:Atom  12:Atom  13:Atom  14:Atom  15:Atom  16:Atom  17:Atom  18:Atom  19:Atom
20:Atom  21:CLASS  24:CLASS  25:CLASS
Generic attributes :
24:
Type of chain           : Linear
Saturation              : Unsaturated
25:
Type of chain           : Linear
Saturation              : Unsaturated
```

```
L13     STRUCTURE UPLOADED

=> d
L13 HAS NO ANSWERS
L13             STR
```




```
Structure attributes must be viewed using STN Express query preparation.

=> 113
SAMPLE SEARCH INITIATED 11:08:23 FILE 'REGISTRY'
```

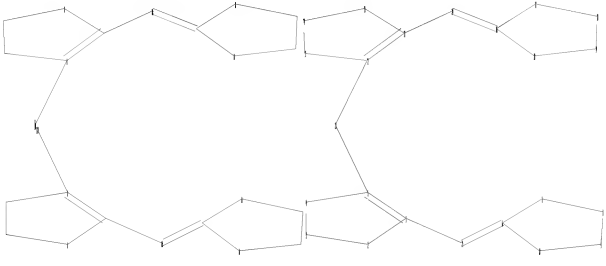
```
SAMPLE SCREEN SEARCH COMPLETED -     74660 TO ITERATE

  2.7% PROCESSED      2000 ITERATIONS                                  0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **INCOMPLETE**
                        BATCH   **INCOMPLETE**
PROJECTED ITERATIONS:       1476929 TO  1509471
PROJECTED ANSWERS:                0 TO        0

L14           0 SEA SSS SAM L13

=>
Uploading C:\Program Files\Stnexp\Queries\10565592\Struc 10.str
```



```
chain nodes :
21  24  25
ring nodes :
1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  16  17  18  19  20
chain bonds :
1-25  5-21  6-25  11-24  12-21  16-24
ring bonds :
1-2  1-5  2-3  3-4  4-5  6-7  6-10  7-8  8-9  9-10  11-12  11-15  12-13  13-14
14-15  16-17  16-20  17-18  18-19  19-20
exact/norm bonds :
1-2  1-5  1-25  2-3  3-4  4-5  5-21  6-7  6-10  6-25  7-8  8-9  9-10  11-12  11-15
11-24  12-13  12-21  13-14  14-15  16-17  16-20  16-24  17-18  18-19  19-20

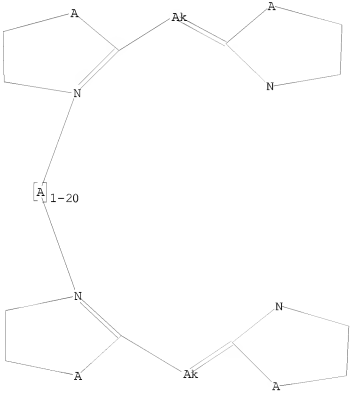

Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:Atom  8:Atom  9:Atom  10:Atom
11:Atom  12:Atom  13:Atom  14:Atom  15:Atom  16:Atom  17:Atom  18:Atom  19:Atom
20:Atom  21:CLASS  24:CLASS  25:CLASS


10565592.trn
```

Generic attributes :
24:
Type of chain : Linear
Saturation : Unsaturated
25:
Type of chain : Linear
Saturation : Unsaturated

L15 STRUCTURE UPLOADED

=> d
L15 HAS NO ANSWERS
L15 STR



Structure attributes must be viewed using STN Express query preparation.

=> l15
SAMPLE SEARCH INITIATED 11:09:28 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 74660 TO ITERATE

2.7% PROCESSED 2000 ITERATIONS 0 ANSWERS

```
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE   **INCOMPLETE**
                        BATCH    **INCOMPLETE**
PROJECTED ITERATIONS:      1476929 TO  1509471
PROJECTED ANSWERS:               0 TO        0

L16           0 SEA SSS SAM L15

=> help
The arrow (=>) is the system prompt, where you enter a command.  For
an explanation of system commands, files, formats, etc., enter "HELP"
and the name of the item you want explained at an arrow prompt (=>).
Enter "HELP COMMANDS" for a list of commands that can be used in this
file.  Enter "HELP MESSAGES" for a list of online explanations that
are available.  The "?" can be used as a synonym for "HELP".

Help is also available at any prompt, and after any error message.
Enter "HELP" or "?" at a prompt to see an explanation of the options.
After an error message, enter "HELP" or "?" at the next prompt and you
will receive a more detailed explanation of the error and how to
correct it.

Automatic help is also available.  When AUHELP is 'ON', you will
automatically receive help following an error message.  For more
information on AUHELP, enter "HELP SET AUHELP" at an arrow
prompt (=>).

Users who need additional assistance can contact the Help Desk at
their nearest STN Service Center.  Enter "HELP STN" for information on
STN Service Centers.  You may also choose to contact the database
representative for the file you are searching, for more detailed help
on database content and search strategy.  For information on how to
contact database representatives for the current file, enter "HELP
DESK" at an arrow prompt (=>).

=> l16 full batch
MISSING OPERATOR

=> batch help
HELP IS NOT VALID HERE
You have either entered a term the system does not recognize or
entered too many terms in your BATCH command.  The following items can
be specified: a structure or query L-number to be searched, the name
of the BATCH request including the /B, the search type (SSS, CSS, FAM,
or EXA), and the search scope (FULL, SAMPLE, or RANGE).  Enter BATCH
at an arrow prompt (=>) and and answer the prompts.  If you are unsure
of the response for a prompt, enter a ?.  For a more detailed
explanation of the BATCH command, enter HELP BATCH at an arrow prompt
(=>).

=> batch
ENTER QUERY L# FOR BATCH REQUEST OR (END):l16
ENTER BATCH REQUEST NAME OR (END):cyanine
'CYANINE' IS NOT A VALID BATCH NAME
Enter the name you wish to use for the BATCH request.
```

```
The name must:
  1.  Begin with a letter,
  2.  Have 1-12 characters,
  3.  Contain only letters (A-Z) and numbers (0-9),
  4.  End with /B,
  5.  Not already be in use as a saved name, and
  6.  Not be: END, SAV, SAVE, SAVED, or an L#.
ENTER BATCH REQUEST NAME OR (END):cyanine/B
ENTER TYPE OF SEARCH (SSS), CSS, FAMILY, OR EXACT:SSS
ENTER SCOPE OF SEARCH (FULL) OR RANGE:FULL
QUERY L16 HAS BEEN SAVED AS BATCH REQUEST 'CYANINE/B'

=> log y
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                        ENTRY    SESSION
FULL ESTIMATED COST                                     20.95     250.45

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                        ENTRY    SESSION
CA SUBSCRIBER PRICE                                      0.00      -7.20

STN INTERNATIONAL LOGOFF AT 11:13:59 ON 23 OCT 2008


Connecting via Winsock to STN



Welcome to STN International!  Enter x:x

LOGINID:SSPTAJRK1626

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2


* * * * * * * * * *   Welcome to STN International   * * * * * * * * * *

 NEWS  1          Web Page for STN Seminar Schedule - N. America
 NEWS  2  JUL 28  CA/CAplus patent coverage enhanced
 NEWS  3  JUL 28  EPFULL enhanced with additional legal status
                  information from the epoline Register
 NEWS  4  JUL 28  IFICDB, IFIPAT, and IFIUDB reloaded with enhancements
 NEWS  5  JUL 28  STN Viewer performance improved
 NEWS  6  AUG 01  INPADOCDB and INPAFAMDB coverage enhanced
 NEWS  7  AUG 13  CA/CAplus enhanced with printed Chemical Abstracts
                  page images from 1967-1998
 NEWS  8  AUG 15  CAOLD to be discontinued on December 31, 2008
 NEWS  9  AUG 15  CAplus currency for Korean patents enhanced
 NEWS 10  AUG 27  CAS definition of basic patents expanded to ensure
                  comprehensive access to substance and sequence
                  information
 NEWS 11  SEP 18  Support for STN Express, Versions 6.01 and earlier,
                  to be discontinued
 NEWS 12  SEP 25  CA/CAplus current-awareness alert options enhanced
```

```
                  to accommodate supplemental CAS indexing of
                  exemplified prophetic substances
 NEWS 13  SEP 26  WPIDS, WPINDEX, and WPIX coverage of Chinese and
                  and Korean patents enhanced
 NEWS 14  SEP 29  IFICLS enhanced with new super search field
 NEWS 15  SEP 29  EMBASE and EMBAL enhanced with new search and
                  display fields
 NEWS 16  SEP 30  CAS patent coverage enhanced to include exemplified
                  prophetic substances identified in new Japanese-
                  language patents
 NEWS 17  OCT 07  EPFULL enhanced with full implementation of EPC2000
 NEWS 18  OCT 07  Multiple databases enhanced for more flexible patent
                  number searching
 NEWS 19  OCT 22  Current-awareness alert (SDI) setup and editing
                  enhanced
 NEWS 20  OCT 22  WPIDS, WPINDEX, and WPIX enhanced with Canadian PCT
                  Applications
 NEWS 21  OCT 24  CHEMLIST enhanced with intermediate list of
                  pre-registered REACH substances

 NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,
              AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS LOGIN    Welcome Banner and News Items
 NEWS IPC8     For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that
specific topic.

  All use of STN is subject to the provisions of the STN Customer
  agreement.  Please note that this agreement limits use to scientific
  research.  Use for software development or design or implementation
  of commercial gateways or other similar uses is prohibited and may
  result in loss of user privileges and other penalties.

* * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 07:59:22 ON 27 OCT 2008

=> file reg
COST IN U.S. DOLLARS                                 SINCE FILE      TOTAL
                                                        ENTRY    SESSION
FULL ESTIMATED COST                                      0.21       0.21

FILE 'REGISTRY' ENTERED AT 07:59:31 ON 27 OCT 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   24 OCT 2008  HIGHEST RN 1065816-63-8
DICTIONARY FILE UPDATES:  24 OCT 2008  HIGHEST RN 1065816-63-8

New CAS Information Use Policies, enter HELP USAGETERMS for details.
```

TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> cyanine/b
NUMERIC VALUE NOT VALID 'CYANINE'
L1   0 CYANINE/B

=> batch
ENTER QUERY L# FOR BATCH REQUEST OR (END):end

=> hel
The arrow (=>) is the system prompt, where you enter a command. For
an explanation of system commands, files, formats, etc., enter "HELP"
and the name of the item you want explained at an arrow prompt (=>).
Enter "HELP COMMANDS" for a list of commands that can be used in this
file. Enter "HELP MESSAGES" for a list of online explanations that
are available. The "?" can be used as a synonym for "HELP".

Help is also available at any prompt, and after any error message.
Enter "HELP" or "?" at a prompt to see an explanation of the options.
After an error message, enter "HELP" or "?" at the next prompt and you
will receive a more detailed explanation of the error and how to
correct it.

Automatic help is also available. When AUHELP is 'ON', you will
automatically receive help following an error message. For more
information on AUHELP, enter "HELP SET AUHELP" at an arrow
prompt (=>).

Users who need additional assistance can contact the Help Desk at
their nearest STN Service Center. Enter "HELP STN" for information on
STN Service Centers. You may also choose to contact the database
representative for the file you are searching, for more detailed help
on database content and search strategy. For information on how to
contact database representatives for the current file, enter "HELP
DESK" at an arrow prompt (=>).

=> help
The arrow (=>) is the system prompt, where you enter a command. For
an explanation of system commands, files, formats, etc., enter "HELP"
and the name of the item you want explained at an arrow prompt (=>).
Enter "HELP COMMANDS" for a list of commands that can be used in this
file. Enter "HELP MESSAGES" for a list of online explanations that
are available. The "?" can be used as a synonym for "HELP".

Help is also available at any prompt, and after any error message.
Enter "HELP" or "?" at a prompt to see an explanation of the options.

After an error message, enter "HELP" or "?" at the next prompt and you will receive a more detailed explanation of the error and how to correct it.

Automatic help is also available. When AUHELP is 'ON', you will automatically receive help following an error message. For more information on AUHELP, enter "HELP SET AUHELP" at an arrow prompt (=>).

Users who need additional assistance can contact the Help Desk at their nearest STN Service Center. Enter "HELP STN" for information on STN Service Centers. You may also choose to contact the database representative for the file you are searching, for more detailed help on database content and search strategy. For information on how to contact database representatives for the current file, enter "HELP DESK" at an arrow prompt (=>).

```
=> help commands
Enter one of these commands at the arrow prompt (=>).

ACTIVATE ----- Assign L#s to saved query or answer set.
ANALYZE ------ Build expand terms from answer fields.
ARCHIVE ------ Purchase rights for archiving.
BATCH -------- Request a batch search.
DELETE ------- Delete saved or current session items.
DISPLAY ------ Display saved or current session items.
DOWNLOAD ----- Transfer data using Kermit protocol.
EDIT --------- Modify the text of an E-number entry.
EXPAND ------- Look at the index around a term.
FILE --------- Specify the search and display file.
HELP --------- For help on how to use the system.
INDEX -------- Specify the Index environment.
LOGOFF ------- End the online session.
NEWS --------- Display current news about the system.
ORDER -------- Order an original document or copy.
POLYLINK ----- Search Using Polymer Linking
PRINT -------- Print answers offline.
QUERY -------- Define a search question (query).
REDISTRIBUTE - Purchase rights for redistribution.
SAVE --------- Save an L-numbered query or answer set.
SCREEN ------- Define a set of screens for searching.
SDI ---------- Request searches be run on file updates.
SEARCH ------- Perform a search.
SELECT ------- Build expand terms from answer fields.
SEQLINK ------ Search Using Sequence Linking
SET ---------- Set terminal and interaction options.
SORT --------- Sort Answers of an L-number list
STRUCTURE ---- Create a structure for searching.
TABULATE ----- Analyze SmartSELECT L-number data.
TRANSFER ----- Extract terms from answers and search.
? ------------ The same as HELP.
Enter one of these commands at the arrow prompt (=>).
```

For more detailed information about a command, enter HELP followed by the command name at an arrow prompt.

Example: => HELP SEARCH

For information on entering multiple commands at a single arrow prompt, enter HELP COMMAND STACKING.

```
=> help batch
The BATCH command is used to request that a search be run overnight.
This type of searching is used when higher limits on the number of
answers or other search parameters are required for a particular
search.  It may also be priced lower than a search done immediately
online.  All of these factors depend on the file and the system
operator.

The easiest way to request a BATCH search is to enter the command at
an arrow prompt (=>), press the carriage return, and allow yourself to
be prompted for all required information.  The information that the
system needs in order to run a BATCH search includes the L# of the
logic expression, the name of the BATCH request (which must end in
/B), and, if appropriate, the search type and scope.

You may wish to use the QUERY command, rather than the SEARCH command,
to create the logic expression for a BATCH search, especially if you
know that the search will exceed limits or if there are search
charges.  L#s used in BATCH requests may not refer to saved names of
any type.  If you wish to use the query from a saved item, ACTIVATE it
and use the resulting L#.  BATCH search L#s may refer to other L#s or
to E#s from SELECT or EXPAND lists.

After your BATCH search request is run, the request name (name/B) is
deleted, and the answer set from the search is saved as name/A.
Enter "DISPLAY SAVED/B" to see which requests are waiting to be
processed and "DISPLAY SAVED/A" to see a list of saved answer set
names, including those from BATCH requests.  You may DELETE requests
for BATCH searches as long as they appear on the list that displays
by entering "DISPLAY SAVED/B".

=> display cyanine/a
NAME             CREATED      NOTES/TITLE
--------------   -----------  ---------------------------------------
CYANINE/A        23 OCT 2008  62 ANSWERS IN FILE REGISTRY

=> cyanine/a
SAVED ANSWER SET NAME MAY NOT BE USED IN QUERIES 'CYANINE/A'
Saved answer sets must be activated before they are used in search
profiles.  This must be done in the same file in which they were
created.  Use the FILE command to change files if necessary, then
enter "ACTIVATE" followed by the saved name (including /A) at an arrow
prompt (=>).  Use the L# assigned to the answer set in your search
profile.

=> activate cyanine/a
L2             STR
L3           62 SEA FILE=REGISTRY SSS FUL L2

=> file caplus
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
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FULL ESTIMATED COST 6.99 7.20

FILE 'CAPLUS' ENTERED AT 08:01:55 ON 27 OCT 2008
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FILE COVERS 1907 - 27 Oct 2008 VOL 149 ISS 18
FILE LAST UPDATED: 26 Oct 2008 (20081026/ED)

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reclassification data for the second quarter of 2008.

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They are available for your review at:

http://www.cas.org/legal/infopolicy.html

=> l3
L4 25 L3

=> d ibib abs hitstr 1-25

L4 ANSWER 1 OF 25 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:420122 CAPLUS
DOCUMENT NUMBER: 147:58161
TITLE: Immobilization of Aprotinin to Fibrinogen as a Novel Method for Controlling Degradation of Fibrin Gels
AUTHOR(S): Smith, Jason D.; Chen, Andrew; Ernst, Lauren A.; Waggoner, Alan S.; Campbell, Phil G.
CORPORATE SOURCE: Institute for Complex Engineered Systems and Molecular Biosensor and Imaging Center, Carnegie Mellon University, Pittsburgh, PA, USA
SOURCE: Bioconjugate Chemistry (2007), 18(3), 695-701
CODEN: BCCHES; ISSN: 1043-1802
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The goal of this work was to demonstrate that aprotinin conjugated to fibrinogen could (1) maintain its function and (2) control fibrin degradation Using the chick chorioallantoic membrane (CAM) assay, we found that blood vessels did not directly invade fibrin constructs containing immobilized fibroblast growth factor-2. Because the fibrin quickly degraded within approx. 5 days, we hypothesized that controlling fibrinolysis may improve direct blood vessel invasion. Aprotinin, a protease inhibitor typically added to slow fibrinolysis, is a small protein and can diffuse out of the

gel resulting in the loss of fibrinolysis protection. Therefore, using a novel synthesis strategy, aprotinin and a fluorescent reporter, Cy3, were chemical conjugated to fibrinogen. In vitro microplate absorbance assays showed that the conjugated aprotinin was able to inhibit plasmin-mediated fibrin degradation and that its activity was comparable to equimolar levels of soluble, nonconjugated aprotinin. Addnl., we found that fibrinolysis rates could be tuned by varying the level of conjugated aprotinin within the gel. The conjugated aprotinin also demonstrated functionality in vivo. In the chick CAM assay, fibrin gels containing conjugated aprotinin were approx. 5 times larger than gels containing soluble aprotinin after 4 days. Also, in support of our hypothesis, we found that immobilized aprotinin within fibrin gels demonstrated substantial blood vessel invasion.

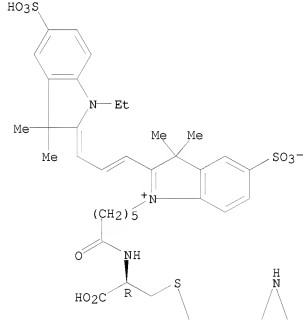
IT 939792-49-1P 939792-51-5DP, conjugates with aprotinin
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(immobilization of aprotinin to fibrinogen as a novel method for controlling degradation of fibrin gels)

RN 939792-49-1 CAPLUS

CN 3H-Indolium, 2,2'-[dithiobis[[(1R)-1-carboxy-2,1-ethanediyl]imino(6-oxo-6,1-hexanediyl)]]bis[2-[3-(1-ethyl-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene)-1-propen-1-yl]-3,3-dimethyl-5-sulfo-, bis(inner salt), potassium salt (1:2) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

PAGE 1-A



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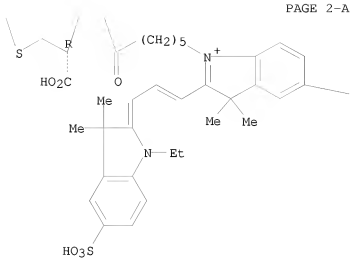


●2 K

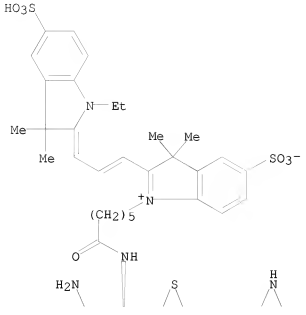
PAGE 2-B

SO_3^-

RN 939792-51-5 CAPLUS
CN 3H-Indolium, 2,2'-[dithiobis[[(1R)-1-(aminocarbonyl)-2,1-ethanediyl]imino(6-oxo-6,1-hexanediyl)]]bis[2-[3-(1-ethyl-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene)-1-propen-1-yl]-3,3-dimethyl-5-sulfo-, bis(inner salt), potassium salt (1:2) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

PAGE 1-A



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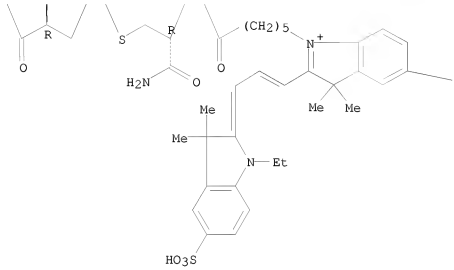
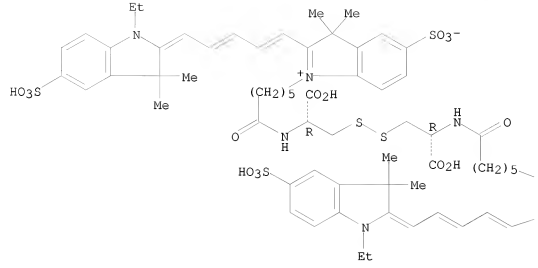


REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 25 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:344612 CAPLUS
DOCUMENT NUMBER: 147:26050
TITLE: Activatable fluorescent probes for tumour-targeting imaging in live mice
AUTHOR(S): Razkin, Jesus; Josserand, Veronique; Boturyn, Didier; Jin, Zhao-hui; Dumy, Pascal; Favrot, Marie; Coll, Jean-Luc; Texier, Isabelle
CORPORATE SOURCE: LEDSS, UMR CNRS 5616, Grenoble, 38041/9, Fr.
SOURCE: ChemMedChem (2006), 1(10), 1069-1072
CODEN: CHEMGX; ISSN: 1860-7179
PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Fluorescent probes were prepared for tumor-targeting imaging in live mice.
IT 920804-72-4
RL: DGN (Diagnostic use); PRP (Properties); BIOL (Biological study); USES (Uses)
(fluorescent probes for tumor-targeting imaging in live mice)
RN 920804-72-4 CAPLUS
CN 3H-Indolium, 1,1'-[dithiobis[[(1R)-1-carboxy-2,1-ethanediyl]imino(6-oxo-6,1-hexanediyl)]]bis[2-[5-(1-ethyl-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene)-1,3-pentadien-1-yl]-3,3-dimethyl-5-sulfo-, bis(inner salt) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

PAGE 1-A



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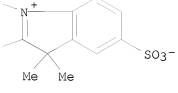


REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 25 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:274229 CAPLUS
DOCUMENT NUMBER: 147:422160
TITLE: Inhibition of fluorescent dyes for the design of efficient activatable probes dedicated to non-invasive small animal imaging
AUTHOR(S): Texier, Isabelle; Heinrich, Emilie

CORPORATE SOURCE: LETI/DTBS CEA Grenoble, Grenoble, 38054, Fr.
SOURCE: Proceedings of SPIE-The International Society for Optical Engineering (2007), 6449(Genetically Engineered and Optical Probes for Biomedical Applications IV), 64490I/1-64490I/11
CODEN: PSISDG; ISSN: 0277-786X
PUBLISHER: SPIE-The International Society for Optical Engineering
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The framework of fluorescent targeting probes for optical imaging is similar to that of contrast agents for other modalities. They generally include a biol. ligand, specific of the biol. process to image, and a label, which confers the probe its optical properties. Moreover, more sophisticated labeling functions, termed "activatable" can be designed. An "activatable probe" will be initially non-fluorescent. Only a specific mol. process, such as an enzymic reaction or cell internalization, is able to activate the probe fluorescence. Such probes are particularly easy to design for the optical imaging modality, because of the easily triggered and well known fluorescence inhibition processes. The optical properties of different com. available organic dyes and their fluorescence inhibition are therefore examined Three classes of activatable probes have been listed: (i) activatable probes which rely on the self-quenching of the label; (ii) activatable probes which use RET (Resonance Energy Transfer) between the label acting as a donor, and an organic non-emissive acceptor; (iii) activatable probes which use an inorg. nanostructure as the inhibitor, such as a gold nano-particle. Whereas activatable probes of class (i) can lead to higher fluorescence levels after activation, their initial fluorescence inhibition can be hindered by structural constraints. Probes of class (ii) can therefore be more interesting according to the probe design. The efficiency of probes of class (iii) using nanometer gold particles is reduced because of their plasmon band lying in the visible and not near-IR domain.

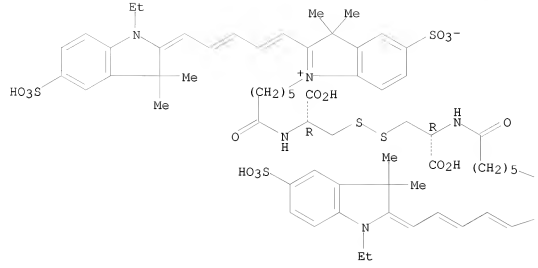
IT 920804-72-4
RL: ARG (Analytical reagent use); ARU (Analytical role, unclassified); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses)
(inhibition of fluorescent dyes for design of efficient activatable probes dedicated to non-invasive small animal imaging)

RN 920804-72-4 CAPLUS

CN 3H-Indolium, 1,1'-[dithiobis[[(1R)-1-carboxy-2,1-ethanediyl]imino(6-oxo-6,1-hexanediyl)]]bis[2-[5-(1-ethyl-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene)-1,3-pentadien-1-yl]-3,3-dimethyl-5-sulfo-, bis(inner salt) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

PAGE 1-A



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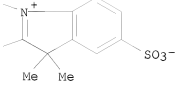


REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 25 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:96240 CAPLUS
DOCUMENT NUMBER: 146:417609
TITLE: Activatable probes for non-invasive small animal fluorescence imaging
AUTHOR(S): Texier, Isabelle; Razkin, Jesus; Josserand, Veronique; Boturyn, Didier; Dumy, Pascal; Coll, Jean-Luc; Rizo,

Philippe
CORPORATE SOURCE: CEA Grenoble, LETI-DTBS, Grenoble, 38054, Fr.
SOURCE: Nuclear Instruments & Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors, and Associated Equipment (2007), 571(1+2), 165-168
CODEN: NIMAER; ISSN: 0168-9002
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Fluorescence tomog. today appears as a complementary imaging modality for assessing mol. processes in small living animals. A new design of fluorescent activatable units for the imaging of cellular internalization of probes is proposed. Disulfide bridges are used as intracellular cleavable bounds for fluorescence activation. These units are not activated in blood, neither in vitro nor in mouse, but specifically in the presence of lysed cells or a chemical reducer. The authors therefore expect that the use of such activatable units, grafted to targeting moieties, will improve significantly the contrast of images obtained in the future.

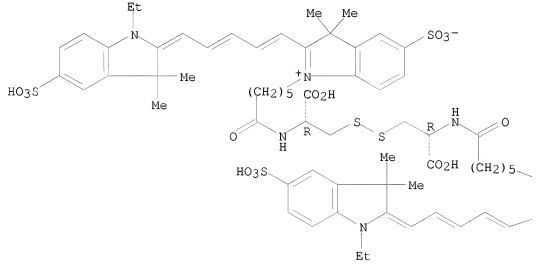
IT 920533-08-0P
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(activatable probes for non-invasive small animal fluorescence imaging)

RN 920533-08-0 CAPLUS

CN 3H-Indolium, 1,1'-[dithiobis[[(1R)-1-carboxy-2,1-ethanediyl]imino(6-oxo-6,1-hexanediyl)]]bis[2-[5-(1-ethyl-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene)-1,3-pentadien-1-yl]-3,3-dimethyl-5-sulfo-, bis(inner salt), potassium salt (1:2) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

PAGE 1-A



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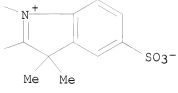


REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 25 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:83843 CAPLUS
DOCUMENT NUMBER: 146:190484
TITLE: Molecular constructs providing an imaging function activatable in intracellular environment
INVENTOR(S): Texier-Nogues, Isabelle; Coll, Jean-Luc; Dumy, Pascal; Boturyn, Didier; Favrot, Marie
PATENT ASSIGNEE(S): Commissariat a l'Energie Atomique, Fr.; Institut National de la Sante et de la Recherche Medicale (INSERM); Universite Joseph Fourier
SOURCE: PCT Int. Appl., 53pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007010128	A1	20070125	WO 2006-FR1749	20060718
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
FR 2888753	A1	20070126	FR 2005-7784	20050721

FR 2888753 B1 20080404
EP 1919513 A1 20080514 EP 2006-778874 20060718
R: DE, FR, GB, IT
PRIORITY APPLN. INFO.: FR 2005-7784 A 20050721
WO 2006-FR1749 W 20060718

AB The invention concerns the field of mol. probe architecture for in vivo imaging. More particularly, the invention concerns mol. constructs providing an imaging function activatable in intracellular environment, said constructs being further bound to a vector which enables certain cells to be targeted, and said cells to be internalized. The inventive fluorescence probes enable in particular images of certain targeted tissues to be formed, while maintaining a low background noise level and, preferably, while obtaining at the targeted tissue, an imaging signal increasing in time. Examples of such probes are fluorophores comprising cysteines linked by sulfide bridge which is cleaved to release and activate the imaging function. Drugs may also be bound to the delivery system and released during activation of the imaging function.

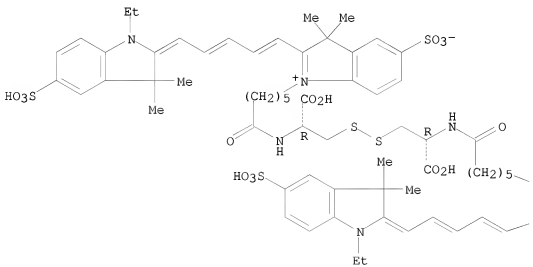
IT 920533-08-0
RL: DGN (Diagnostic use); PRP (Properties); BIOL (Biological study); USES (Uses)
(mol. constructs providing an imaging function activatable in intracellular environment)

RN 920533-08-0 CAPLUS

CN 3H-Indolium, 1,1'-[dithiobis[[(1R)-1-carboxy-2,1-ethanediyl]imino(6-oxo-6,1-hexanediyl)]]bis[2-[5-(1-ethyl-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene)-1,3-pentadien-1-yl]-3,3-dimethyl-5-sulfo-, bis(inner salt), potassium salt (1:2) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

PAGE 1-A



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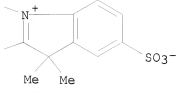


REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

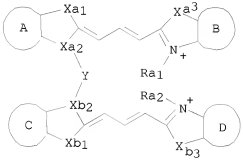
L4 ANSWER 6 OF 25 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:1226159 CAPLUS
DOCUMENT NUMBER: 146:9313
TITLE: Trimethine dimer compounds for high density recordable optical recording media
INVENTOR(S): Nishimoto, Taizo; Takahashi, Eiichi; Murayama, Shunsuke; Aso, Yoshiaki; Ogiso, Akira; Kohsaka, Akihiro; Yoshida, Takafumi; Sasaki, Hiroyuki; Kato, Kenichi; Terao, Hiroshi; Kumagae, Yojiro
PATENT ASSIGNEE(S): Mitsui Chemicals, Inc., Japan
SOURCE: PCT Int. Appl., 133pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006123807	A1	20061123	WO 2006-JP310087	20060516

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

EP 1900779 A1 20080319 EP 2006-732661 20060516
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR
CN 101175822 A 20080507 CN 2006-80016813 20071115
IN 2007DN09117 A 20080125 IN 2007-DN9117 20071127
KR 2008008418 A 20080123 KR 2007-72897 20071211
PRIORITY APPLN. INFO.: JP 2005-143484 A 20050517
JP 2006-1914 A 20060106
WO 2006-JP310087 W 20060516
OTHER SOURCE(S): MARPAT 146:9313
GI



I

AB The present invention relates to trimethine dimer compds. I, wherein A, B, C, D = (un)substituted benzene or naphthalene ring; Xa1, Xb1, Xa3, Xb3 = O, S, Se, or (un)substituted methylene, C3-6 cycloalkane-1,1-diyl, or imino; Xa2, Xb2 = imino or (un)substituted methylene (if Xa2 = Xb2 = imino group, one of Xa1, Xb1, Xa3 and Xb3 = (un)substituted 1-alkyl-1-benzylmethylene, 1,1-dibenzylmethylene, or C3-6 cycloalkane-1,1-diyl); Ra1, Ra2 = (un)substituted alkyl or benzyl; Z = anion; and a, b = 1-2 integer (a + b = 2). Thus, 115.1 g 1,1,2-trimethyl-1H-benz[e]indole and 69.1 g α,α'-dibromo-p-xylene were refluxed in toluene for 19 h to give an indolenine compound, 5.2 g of which was reacted with 7.3 g a compound II at 83-86° for 2 h in the presence of 2 g methanesulfonic acid to give a trimethine dimer compound with λmax 577.0 nm, extinction coefficient 1.12 + 105 mL/g·cm, fast recording sensitivity, and reduced heat interference. when used as a recording layer for an optical recording medium.

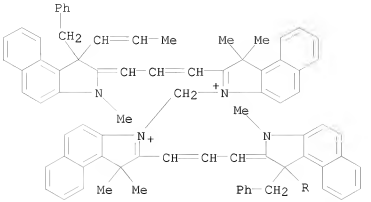
IT 915317-91-8
RL: TEM (Technical or engineered material use); USES (Uses)
(preparation of trimethine dimer compds. for high d. recordable optical recording media)

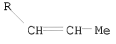
RN 915317-91-8 CAPLUS

CN 1H-Benz[e]indolium, 3,3'-methylenebis[2-[3-[1,3-dihydro-3-methyl-1-(phenylmethyl)-1-(1-propen-1-yl)-2H-benz[e]indol-2-ylidene]-1-propen-1-yl]-1,1-dimethyl-, perchlorate (1:2) (CA INDEX NAME)

CM 1

CRN 915317-90-7
CMF C81 H74 N4





CM 2

CRN 14797-73-0
CMF Cl O4

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 25 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:978788 CAPLUS
DOCUMENT NUMBER: 145:357045
TITLE: Synthesis of nucleosides or nucleotides conjugated to molecular markers via water-soluble polymers for use in nucleic acid labeling or sequence analysis
INVENTOR(S): Cherkasov, Dmitry; Baeuml, Englbert
PATENT ASSIGNEE(S): Genovoxx GmbH, Germany
SOURCE: PCT Int. Appl., 176pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

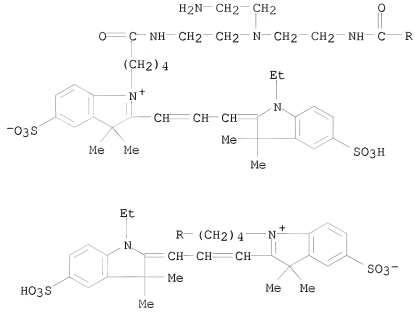
WO 2006097320 A2 20060921 WO 2006-EP2461 20060317
WO 2006097320 A3 20070308
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
DE 102006012317 A1 20070118 DE 2006-102006012317 20060317
EP 1885876 A2 20080213 EP 2006-723505 20060317
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR
PRIORITY APPLN. INFO.: DE 2005-102005012301A 20050317
WO 2006-EP2461 W 20060317
OTHER SOURCE(S): MARPAT 145:357045

AB The invention relates to the structure, production and use of modified nucleotide and nucleoside building blocks. Title compds. are prepared by conjugating a nucleotide triphosphate derivative to a linker such as a water-soluble polymer (e.g., PEG), which bears a suitable reporter group (e.g., biotin or indolium dye Cy3). Several prepared compds. were tested as substrates for nucleic acid polymerase enzymes and found to be accepted as subunits.

IT 910039-98-4P 910040-00-5P
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of nucleosides or nucleotides conjugated to mol. markers via water-soluble polymers for use in nucleic acid labeling or sequence anal.)

RN 910039-98-4 CAPLUS

CN 3H-Indolium, 2,2'-[[(2-aminoethyl)imino]bis[2,1-ethanediylimino(5-oxo-5,1-pentanediyl)]]bis[2-[3-(1-ethyl-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene)-1-propenyl]-3,3-dimethyl-5-sulfo-, bis(inner salt) (9CI) (CA INDEX NAME)



RN 910040-00-5 CAPLUS
CN 3H-Indolium, 2,2'-[[[2-[(3-mercapto-1-oxopropyl)amino]ethyl]imino]bis[2,1-ethanediylimino(5-oxo-5,1-pentanediyl)]]bis[2-[3-(1-ethyl-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene)-1-propenyl]-3,3-dimethyl-5-sulfo-, bis(inner salt) (9CI) (CA INDEX NAME)

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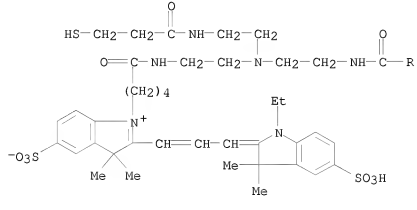

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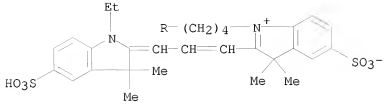

IT 910039-99-5P
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(preparation of nucleosides or nucleotides conjugated to mol. markers via water-soluble polymers for use in nucleic acid labeling or sequence anal.)
RN 910039-99-5 CAPLUS
CN 3H-Indolium, 2,2'-[[[2-[[1-oxo-3-(2-pyridinyldithio)propyl]amino]ethyl]imino]bis[2,1-ethanediylimino(5-oxo-5,1-pentanediyl)]]bis[2-[3-(1-ethyl-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene)-1-propenyl]-3,3-dimethyl-5-sulfo-, bis(inner salt) (9CI) (CA INDEX NAME)

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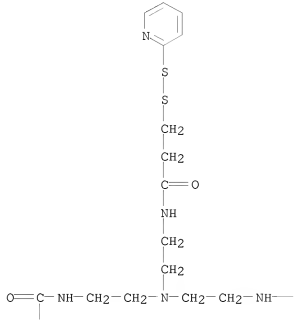

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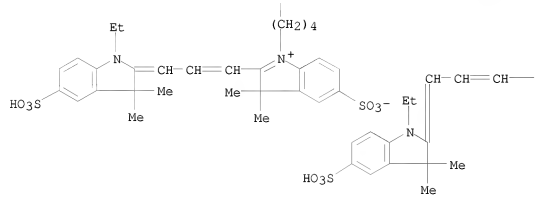

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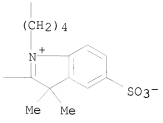

L4 ANSWER 8 OF 25 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:1089685 CAPLUS
DOCUMENT NUMBER: 143:368751
TITLE: Binary cyanine dye for high speed DVD-R and its synthesis
INVENTOR(S): Su, Jianhua; Meng, Fanshun; Tian, He; Li, Cui; Wang, Hailong; Chen, Kongchang
PATENT ASSIGNEE(S): East China University of Science and Technology, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 21 pp. CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1563201	A	20050112	CN 2004-10017165	20040324
CN 1259319	C	20060614		
PRIORITY APPLN. INFO.:			CN 2004-10017165	20040324

OTHER SOURCE(S): CASREACT 143:368751; MARPAT 143:368751
AB This invention discloses a binary cyanine dye for high speed DVD-R and its synthesis. The binary compound of cyanine dye has good solubility in organic solvent (especially alcs.) and a big molar extinction coefficient, and can be used as the recording media for DVD-R disk to improve the recording speed.
IT 866408-02-8P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(in synthesis of binary cyanine dyes for high speed DVD-R)
RN 866408-02-8 CAPLUS
CN 1H-Benz[e]indolium, 3,3'-(1,5-pentanediyl)bis[2-[3-(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)-1-propenyl]-1,1-dimethyl-, bis[hexafluorophosphate(1-)] (9CI) (CA INDEX NAME)

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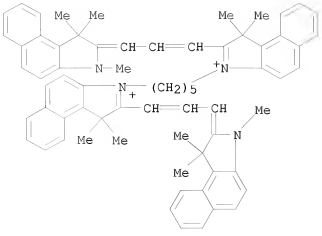
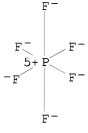
CRN 866408-01-7
CMF C69 H70 N4



CM 2

CRN 16919-18-9
CMF F6 P
CCI CCS



IT 866408-05-1P 866408-20-0P 866408-25-5P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(synthesis of binary cyanine dyes for high speed DVD-R)
RN 866408-05-1 CAPLUS
CN 1H-Benz[e]indolium, 3,3'-(1,5-pentanediyl)bis[2-[3-(1-butyl-5-chloro-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene)-1-propenyl]-1,1-dimethyl-, diperchlorate (9CI) (CA INDEX NAME)

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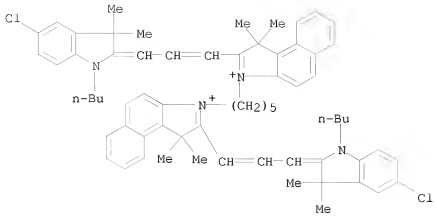
CRN 866408-04-0
CMF C67 H76 Cl2 N4



CM 2

CRN 14797-73-0
CMF Cl O4

RN 866408-20-0 CAPLUS
CN 3H-Benz[g]indolium, 1,1'-(1,6-hexanediyl)bis[2-[3-(1-butyl-1,3-dihydro-5-methoxy-3,3-dimethyl-2H-indol-2-ylidene)-1-propenyl]-3,3-dimethyl-, diperchlorate (9CI) (CA INDEX NAME)

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CRN 866408-19-7
CMF C70 H84 N4 O2

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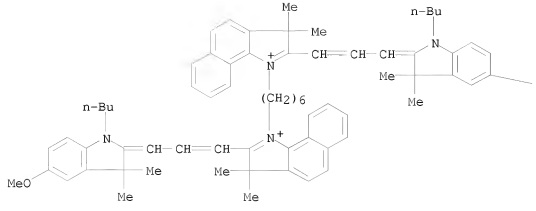

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OMe

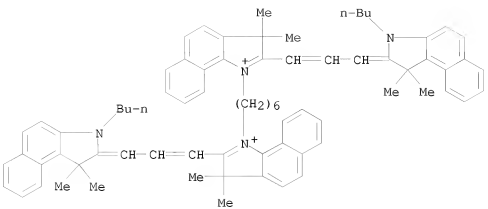
CM 2

CRN 14797-73-0
CMF Cl O4

RN 866408-25-5 CAPLUS
CN 3H-Benz[g]indolium, 1,1'-(1,6-hexanediyl)bis[2-[3-(3-butyl-1,3-dihydro-1,1-dimethyl-2H-benz[e]indol-2-ylidene)-1-propenyl]-3,3-dimethyl-, diperchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 866408-24-4
CMF C76 H84 N4



CM 2

CRN 14797-73-0
CMF C1 O4

L4 ANSWER 9 OF 25 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:1002879 CAPLUS
DOCUMENT NUMBER: 143:280497
TITLE: Nucleosides/nucleotides conjugated to molecular markers via water-soluble polymers and their use in nucleic acid labeling and sequence analysis
INVENTOR(S): Cherkasov, Dmitry; Hennig, Christian; Baeuml, Englbert
PATENT ASSIGNEE(S): Genovoxx G.m.b.H., Germany
SOURCE: Ger. Offen., 110 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

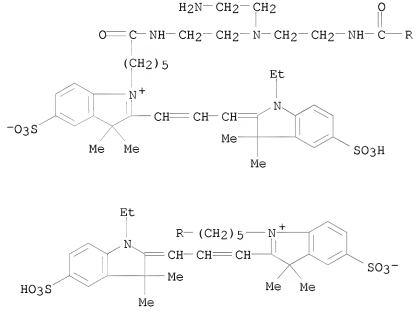
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 102004009704	A1	20050915	DE 2004-102004009704	20040227

PRIORITY APPLN. INFO.: DE 2004-102004009704 20040227
OTHER SOURCE(S): MARPAT 143:280497
AB The invention describes a new class of nucleoside or nucleotide derivative, which is labeled with a mol. markers via a water-soluble polymer. Suitable water-soluble polymers include PEG, polysaccharides, polyamides, polyacrylic acids, polyvinyl alc., etc. Markers include biotin, haptens, radioactive isotopes, dyes, and fluorophores. The nucleoside/nucleotide derivs. are

substrates for such enzymes as DNA and RNA polymerases and terminal transferase so they may be used to label nucleic acids as well as to determine the sequence of nucleic acids. Thus, dUTP attached via PEG through the 5-postion to biotin was added to streptavidin to form a complex of dUTP-PEG-biotin and streptavidin. This complex was incorporated without difficulty into a nucleic acid by the Klenow fragment of E. coli DNA polymerase.

IT 851900-89-5P 851900-90-8P 851900-91-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(nucleosides/nucleotides conjugated to mol. markers via water-soluble polymers and their use in nucleic acid labeling and sequence anal.)

RN 851900-89-5 CAPLUS
CN 3H-Indolium, 1,1'-[[(2-aminoethyl)imino]bis[2,1-ethanediylimino(6-oxo-6,1-hexanediyl)]]bis[2-[3-(1-ethyl-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene)-1-propenyl]-3,3-dimethyl-5-sulfo-, bis(inner salt) (9CI) (CA INDEX NAME)



RN 851900-90-8 CAPLUS
CN 3H-Indolium, 1,1'-[[[2-[[1-oxo-3-(2-pyridinyldithio)propyl]amino]ethyl]imino]bis[2,1-ethanediylimino(6-oxo-6,1-hexanediyl)]]bis[2-[3-(1-ethyl-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene)-1-propenyl]-3,3-dimethyl-5-sulfo-, bis(inner salt) (9CI) (CA INDEX NAME)

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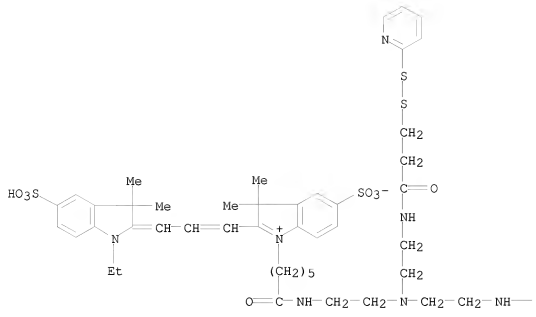

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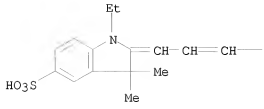

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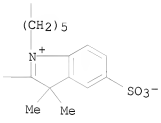

RN 851900-91-9 CAPLUS
CN 3H-Indolium, 1,1'-[[[2-[(3-mercapto-1-oxopropyl)amino]ethyl]imino]bis[2,1-ethanediylimino(6-oxo-6,1-hexanediyl)]]bis[2-[3-(1-ethyl-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene)-1-propenyl]-3,3-dimethyl-5-sulfo-, bis(inner salt) (9CI) (CA INDEX NAME)

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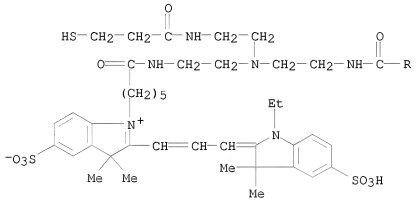

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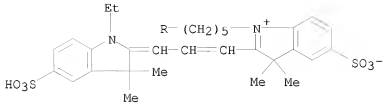

L4 ANSWER 10 OF 25 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:569319 CAPLUS
DOCUMENT NUMBER: 143:103226
TITLE: Fluorescent imaging contrast agents containing cyanine dye structure unit, and method for fluorescent imaging therewith
INVENTOR(S): Hanyu, Takeshi
PATENT ASSIGNEE(S): Konica Minolta Medical & Graphic, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 21 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005170812	A	20050630	JP 2003-409974	20031209

PRIORITY APPLN. INFO.: JP 2003-409974 20031209
OTHER SOURCE(S): MARPAT 143:103226
AB The invention relates to a fluorescent imaging contrast agent suitable for use in tumor fluorescent imaging, wherein the agent is characterized by containing fluorescent cyanine dye structure unit 2-10 and acid groups 2-20 in the mol.
IT 856421-55-1P
RL: DGN (Diagnostic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(fluorescent imaging contrast agents containing cyanine dye structure unit, and method for fluorescent imaging therewith)
RN 856421-55-1 CAPLUS
CN 3H-Indolium, 1-[3-[[4-[[3-[2-[7-[1,3-dihydro-3,3-dimethylsulfo-1-(4-sulfobutyl)-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethylsulfo-3H-indolio]-1-oxopropyl]amino]butyl]amino]-3-oxopropyl]-2-[7-[1-[3-[[4-[[3-[2-[7-[1,3-dihydro-3,3-dimethylsulfo-1-(4-sulfobutyl)-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethylsulfo-3H-indolio]-1-oxopropyl]amino]butyl]amino]-3-oxopropyl]-1,3-dihydro-3,3-dimethylsulfo-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethylsulfo-, octasodium salt (9CI) (CA INDEX NAME)

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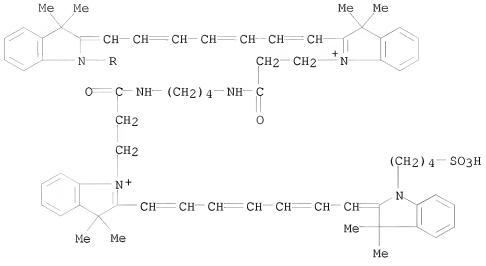

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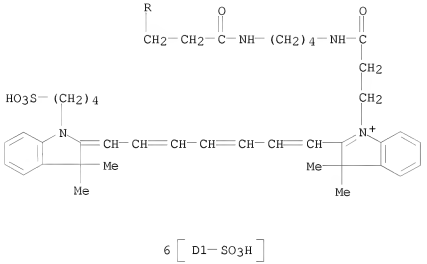

6 [D1— SO_3H]

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● 8 Na

L4 ANSWER 11 OF 25 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:429424 CAPLUS

DOCUMENT NUMBER: 142:477059
TITLE: Nucleoside/nucleotide derivatives conjugated to markers via linkers for use in enzymatic labeling of nucleic acids
INVENTOR(S): Cherkasov, Dmitry; Hennig, Christian
PATENT ASSIGNEE(S): Genovoxx G.m.b.H., Germany
SOURCE: PCT Int. Appl., 212 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005044836	A2	20050519	WO 2004-EP12556	20041105
WO 2005044836	A3	20070719		
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RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, AP, EA, EP, OA				
DE 10356837	A1	20050630	DE 2003-10356837	20031205
EP 1725572	A2	20061129	EP 2004-797663	20041105
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, HR, LT, LV, MK, YU				

PRIORITY APPLN. INFO.: DE 2003-10351636 A 20031105
DE 2003-10356837 A 20031205
WO 2004-EP12556 W 20041105

OTHER SOURCE(S): MARPAT 142:477059

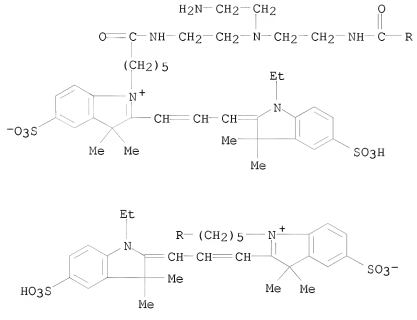
AB The invention relates to novel classes of nucleotides that can be used as substrates for enzymes, e.g., for labeling nucleic acids. The nucleoside/nucleotide is conjugated to a marker via a long arm, composed of PEG, polyamide, PVP, PVA, etc. The marker may be a signal generating- or signal-transmitting moiety, a catalytic moiety, or an affinity moiety. The length of the arm results in retention of the substrate characteristics of the unmodified nucleoside/nucleotide. Thus, dUTP attached through the 5-position via a PEG linker to biotin, was synthesized and a complex of this compound with streptavidin was prepared This complex was used as a substrate by DNA polymerase.

IT 851900-89-5P 851900-90-8P 851900-91-9P
851900-95-3P
RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(nucleoside/nucleotide derivs. conjugated to markers via linkers for use in enzymic labeling of nucleic acids)

RN 851900-89-5 CAPLUS

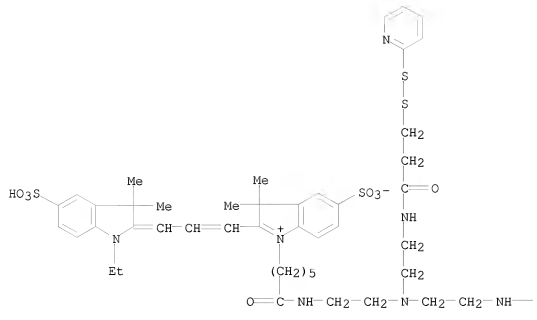
CN 3H-Indolium, 1,1'-[[(2-aminoethyl)imino]bis[2,1-ethanediylimino(6-oxo-6,1-hexanediyl)]]bis[2-[3-(1-ethyl-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene)-1-propenyl]-3,3-dimethyl-5-sulfo-, bis(inner salt) (9CI) (CA

INDEX NAME)



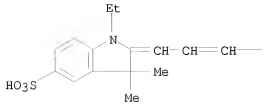
RN 851900-90-8 CAPLUS
CN 3H-Indolium, 1,1'-[[[2-[[1-oxo-3-(2-pyridinyldithio)propyl]amino]ethyl]imino]bis[2,1-ethanediylimino(6-oxo-6,1-hexanediyl)]]bis[2-[3-(1-ethyl-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene)-1-propenyl]-3,3-dimethyl-5-sulfo-, bis(inner salt) (9CI) (CA INDEX NAME)

PAGE 1-A

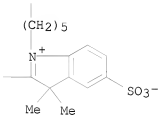


PAGE 1-B

PAGE 2-A

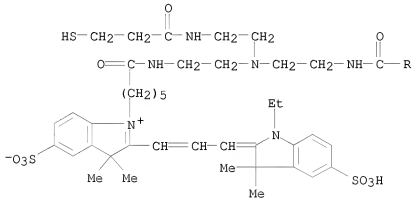


PAGE 2-B

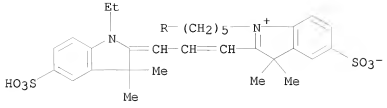


RN 851900-91-9 CAPLUS
CN 3H-Indolium, 1,1'-[[[2-[(3-mercapto-1-oxopropyl)amino]ethyl]imino]bis[2,1-ethanediylimino(6-oxo-6,1-hexanediyl)]]bis[2-[3-(1-ethyl-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene)-1-propenyl]-3,3-dimethyl-5-sulfo-, bis(inner salt) (9CI) (CA INDEX NAME)

PAGE 1-A



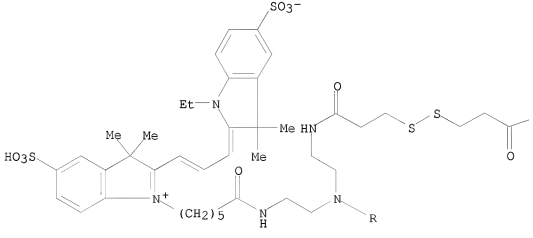
PAGE 2-A



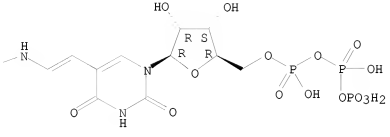
RN 851900-95-3 CAPLUS
CN 3H-Indolium, 1,1'-[[[2-[[1-oxo-3-[[3-oxo-3-[[2-[1,2,3,4-tetrahydro-1-[5-O-[hydroxy[[hydroxy(phosphonooxy)phosphinyl]oxy]phosphinyl]-β-D-ribofuranosyl]-2,4-dioxo-5-pyrimidinyl]ethenyl]amino]propyl]dithio]propyl]amino]ethyl]imino]bis[2,1-ethanediylimino(6-oxo-6,1-hexanediyl)]]bis[2-[3-(1-ethyl-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene)-1-propenyl]-3,3-dimethyl-5-sulfo-, bis(inner salt) (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

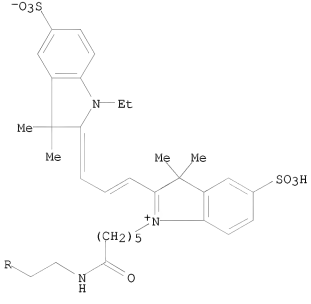
PAGE 1-A



PAGE 1-B



PAGE 2-A



L4 ANSWER 12 OF 25 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:74159 CAPLUS
DOCUMENT NUMBER: 142:157828
TITLE: Near-IR light-absorbing cyanine dyes with good solubility and light stability
INVENTOR(S): Shinpo, Akira; Takahashi, Yoshimi; Yano, Kentaro; Aizawa, Yasushi
PATENT ASSIGNEE(S): Kabushiki Kaisha Hayashibara Seibutsu Kagaku Kenkyujo, Japan
SOURCE: PCT Int. Appl., 37 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005007753	A1	20050127	WO 2004-JP10334	20040721
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1655347	A1	20060510	EP 2004-770844	20040721
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
US 20060189803	A1	20060824	US 2006-565592	20060123

PRIORITY APPLN. INFO.: JP 2003-277736 A 20030722
WO 2004-JP10334 W 20040721

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The dyes can be used as light absorbents, are obtained from dye compds. in which multiple cyanine dye skeletons bonded to each other through a bivalent group and an organometallic complex as a counter ion, where the cyanine dyes are capable of substantially absorbing light of wavelength larger than 700 nm. Thus, heating I with II in MeOH in the presence of Ac2O and Et3N at 65-70° for 30 min gave compound III. Mixing III with IV in acetonitrile and chloroform at 60° for 15 min gave a blue dye.

IT 830320-38-2P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(blue dye; manufacture of near-IR light-absorbing cyanine dyes with good solubility and light stability)

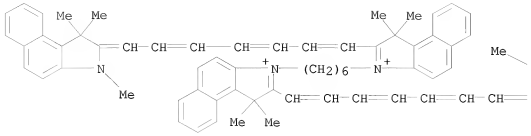
RN 830320-38-2 CAPLUS

CN 1H-Benz[e]indolium, 3,3'-(1,6-hexanediyl)bis[2-[7-(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)-1,3,5-heptatrienyl]-1,1-dimethyl-, bis[(SP-4-1)-bis[4-[[3,4-di(mercapto-κS)phenyl]sulfonyl]morpholinato(2-)]cuprate(1-)] (9CI) (CA INDEX NAME)

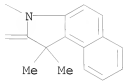
CM 1

CRN 830320-36-0
CMF C78 H80 N4

PAGE 1-A

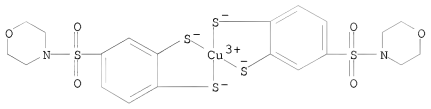


PAGE 1-B



CM 2

CRN 194554-00-2
CMF C20 H22 Cu N2 O6 S6
CCI CCS

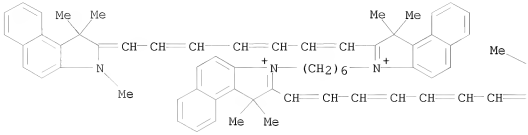


IT 830320-37-1P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(violet dye intermediate; manufacture of near-IR light-absorbing cyanine dyes with good solubility and light stability)
RN 830320-37-1 CAPLUS
CN 1H-Benz[e]indolium, 3,3'-(1,6-hexanediyl)bis[2-[7-(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)-1,3,5-heptatrienyl]-1,1-dimethyl-, bis[hexafluorophosphate(1-)] (9CI) (CA INDEX NAME)

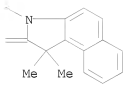
CM 1

CRN 830320-36-0
CMF C78 H80 N4

PAGE 1-A

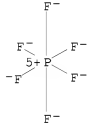


PAGE 1-B



CM 2

CRN 16919-18-9
CMF F6 P
CCI CCS



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 13 OF 25 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:396283 CAPLUS
DOCUMENT NUMBER: 133:200369

TITLE: Influence of interaction of chromophores, linked by the unconjugated chain, on the luminescence properties of biscyanine dyes

AUTHOR(S): Ibrayev, N. K.; Ishchenko, A. A.; Karamysheva, R. K.; Mushkalo, I. L.

CORPORATE SOURCE: Department of Physics, Karaganda State University, Karaganda, 470074, Kazakhstan

SOURCE: Journal of Luminescence (2000), 90(3&4), 81-88
CODEN: JLUMA8; ISSN: 0022-2313

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Deactivation of electronically excited state of chemical bound dimers - biscyanines with two chromophores linked by unconjugated chains and corresponding monomer dye was studied. The quantum yield of dimer fluorescence is lower than that of a monomer dye. The amount of quantum yield of fluorescence decreases with the increase of chromophores interaction degree (the decrease of the isolating polymethylene bridge length). It is shown from the external heavy-atom effect studies that the decrease of biscyanines fluorescence ability is connected with the enhancement of singlet-triplet intersystem crossing (S1→T1). The probability of the triplet states population in biscyanines with chromophores in parallel arrangement is considerably higher than that in similar compds. with an angular arrangement of chromophores. The delayed fluorescence was observed in the case of dyes with parallel arrangement of chromophores.

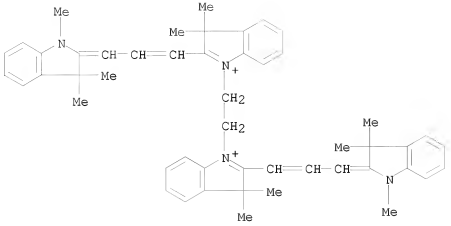
IT 159504-48-0 159504-50-4 159504-52-6
159504-54-8
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)
(influence of interaction of chromophores, linked by unconjugated chain, on luminescence properties of biscyanine dyes)

RN 159504-48-0 CAPLUS

CN 3H-Indolium, 1,1'-(1,2-ethanediyl)bis[2-[3-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1-propenyl]-3,3-dimethyl-, bis[tetrafluoroborate(1-)] (9CI) (CA INDEX NAME)

CM 1

CRN 75805-06-0
CMF C50 H56 N4



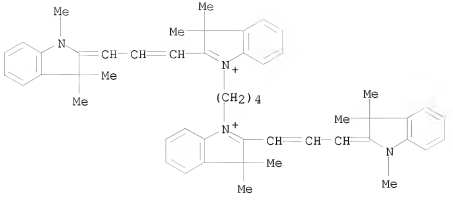
CM 2

CRN 14874-70-5
CMF B F4
CCI CCS

RN 159504-50-4 CAPLUS
CN 3H-Indolium, 1,1'-(1,4-butanediyl)bis[2-[3-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1-propenyl]-3,3-dimethyl-, bis[tetrafluoroborate(1-)] (9CI) (CA INDEX NAME)

CM 1

CRN 142817-63-8
CMF C52 H60 N4



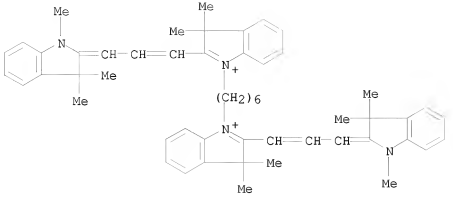
CM 2

CRN 14874-70-5
CMF B F4
CCI CCS

RN 159504-52-6 CAPLUS
CN 3H-Indolium, 1,1'-(1,6-hexanediyl)bis[2-[3-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1-propenyl]-3,3-dimethyl-, bis[tetrafluoroborate(1-)] (9CI) (CA INDEX NAME)

CM 1

CRN 113545-08-7
CMF C54 H64 N4



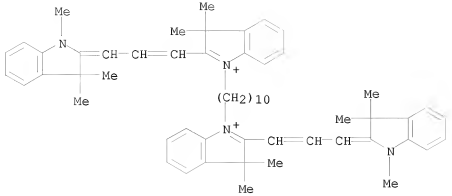
CM 2

CRN 14874-70-5
CMF B F4
CCI CCS

RN 159504-54-8 CAPLUS
CN 3H-Indolium, 1,1'-(1,10-decanediyl)bis[2-[3-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1-propenyl]-3,3-dimethyl-, bis[tetrafluoroborate(1-)] (9CI) (CA INDEX NAME)

CM 1

CRN 113545-10-1
CMF C58 H72 N4



CM 2

CRN 14874-70-5
CMF B F4
CCI CCS

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 14 OF 25 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:278180 CAPLUS
DOCUMENT NUMBER: 132:300771
TITLE: Optical filter
INVENTOR(S): Harada, Toru; Yamada, Tsukasa; Suzuki, Ryuta; Yabuki, Yoshiharu; Nishigaki, Junji
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: PCT Int. Appl., 137 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000023829	A1	20000427	WO 1999-JP5785	19991020
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

JP 2000193802	A	20000714	JP 1999-36046	19990215
EP 1124144	A1	20010816	EP 1999-970741	19991020
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
CN 1295523	C	20070117	CN 1999-814736	19991020
JP 2001131435	A	20010515	JP 2000-43111	20000221
US 6532120	B1	20030311	US 2001-807882	20010420
PRIORITY APPLN. INFO.:			JP 1998-316876 A	19981020
			JP 1999-42080 A	19990219
			JP 1999-121699 A	19990428
			JP 1999-121700 A	19990428
			JP 1999-124273 A	19990430
			JP 1999-234243 A	19990820
			WO 1999-JP5785 W	19991020

OTHER SOURCE(S): MARPAT 132:300771

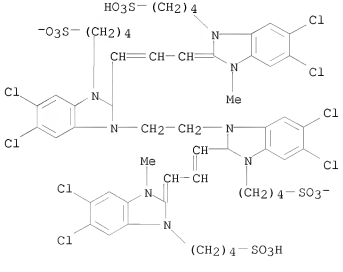
AB The invention relates to an optical filter that comprises a transparent support and a filter layer. The filter layer has an absorption peak in the wavelength range of 620 from 560 nm, and the full width at half maximum of the absorption peak ranges from 5 to 50 nm. This optical filter adequately absorbs undue light in an image display device (particularly, a plasma display panel).

IT 264608-59-5 264608-60-8
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(optical filter for PDP)

RN 264608-59-5 CAPLUS

CN 1H-Benzimidazolium, 1,1'-(1,2-ethanediyl)bis[5,6-dichloro-2-[3-[5,6-dichloro-1,3-dihydro-1-methyl-3-(4-sulfobutyl)-2H-benzimidazol-2-ylidene]-1-propenyl]-3-(4-sulfobutyl)-, bis(inner salt), disodium salt (9CI) (CA INDEX NAME)

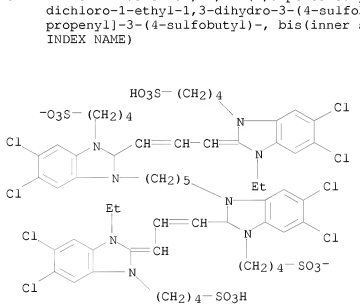
PAGE 1-A



PAGE 2-A

●2 Na

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 264608-60-8 CAPLUS
CN 1H-Benzimidazolium, 1,1'-(1,5-pentanediyl)bis[5,6-dichloro-2-[3-[5,6-dichloro-1-ethyl-1,3-dihydro-3-(4-sulfobutyl)-2H-benzimidazol-2-ylidene]-1-propenyl]-3-(4-sulfobutyl)-, bis(inner salt), disodium salt (9CI) (CA INDEX NAME)



●2 Na

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 15 OF 25 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1999:475129 CAPLUS
DOCUMENT NUMBER: 131:235663
TITLE: Influence of the interaction of chromophores of bis-cyanine dyes on the photogeneration of charge carriers in poly(N-epoxypropylcarbazole) films
AUTHOR(S): Davidenko, N. A.; Ishchenko, A. A.; Mushkalo, I. L.; Pavlov, V. A.
CORPORATE SOURCE: Taras Shevchenko Kiev National University, Kiev, 252033, Ukraine
SOURCE: Theoretical and Experimental Chemistry (Translation of Teoreticheskaya i Eksperimental'naya Khimiya) (1999), Volume Date 1998, 34(6), 343-347
CODEN: TEXCAK; ISSN: 0040-5760
PUBLISHER: Consultants Bureau
DOCUMENT TYPE: Journal
LANGUAGE: English

AB An increase in photocond. and in the extinguishing effect of an external elec. field has been observed in the photoluminescence of doped poly(N-epoxypropylcarbazole) films during changing from monocyanine dyes to the corresponding bis-cyanines. It was concluded that an increase of photogeneration of triplet electron-hole pairs occurs with such replacement of the dye and that dissociation of the pairs was responsible for the photocond.

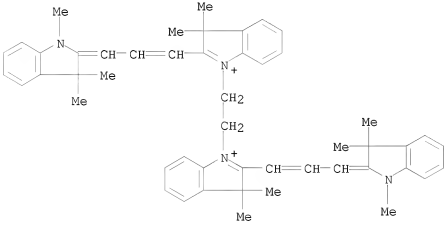
IT 113545-02-1
RL: MOA (Modifier or additive use); USES (Uses)
(photosensitizer; photogeneration of charge carriers in cyanine dye-doped poly(N-epoxypropylcarbazole) films)

RN 113545-02-1 CAPLUS

CN 3H-Indolium, 1,1'-(1,2-ethanediyl)bis[2-[3-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1-propenyl]-3,3-dimethyl-, diperchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 75805-06-0
CMF C50 H56 N4



CM 2

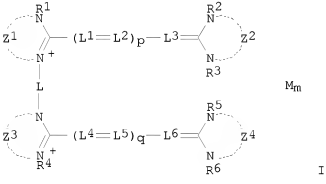
CRN 14797-73-0
CMF Cl O4

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 16 OF 25 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1998:758732 CAPLUS
DOCUMENT NUMBER: 130:73780
TITLE: Silver halide photographic material and methine compound with high optical absorption contained in it as sensitizer
INVENTOR(S): Kobayashi, Masaru; Hio, Takanori
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10310715	A	19981124	JP 1997-119775	19970509
PRIORITY APPLN. INFO.:			JP 1997-119775	19970509

OTHER SOURCE(S): MARPAT 130:73780
GI

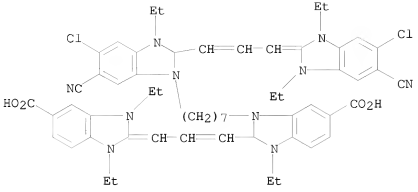


AB The photog. material contains ≥1 methine compound I (Z1-4 = atomic group to form 5- or 6-membered azacycle; L1-6 = methine; p, q = 0-3; L = divalent linkage group; R1-6 = alkyl without any leaving groups; M = counter ion; m = 0-10 for charge balance). The compound I working as a sensitizer is also claimed. The material shows high optical absorption and high sensitivity.

IT 217483-57-3
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
(silver halide photog. material containing methine compound with high optical absorption as sensitizer)

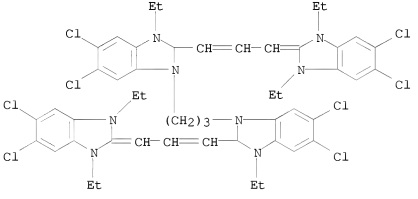
RN 217483-57-3 CAPLUS

CN 1H-Benzimidazolium, 3-[7-[5-carboxy-2-[3-(5-carboxy-1,3-diethyl-1,3-dihydro-2H-benzimidazol-2-ylidene)-1-propen-1-yl]-1-ethyl-1H-benzimidazolium-3-yl]heptyl]-6-chloro-2-[3-(5-chloro-6-cyano-1,3-diethyl-1,3-dihydro-2H-benzimidazol-2-ylidene)-1-propen-1-yl]-5-cyano-1-ethyl-, bromide (1:2) (CA INDEX NAME)



●2 Br^-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
IT 217483-56-2P
RL: DEV (Device component use); MOA (Modifier or additive use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)
(silver halide photog. material containing methine compound with high optical
absorption as sensitizer)
RN 217483-56-2 CAPLUS
CN 1H-Benzimidazolium, 1,1'-(1,3-propanediyl)bis[5,6-dichloro-2-[3-(5,6-dichloro-1,3-diethyl-1,3-dihydro-2H-benzimidazol-2-ylidene)-1-propenyl]-3-ethyl-, diiodide (9CI) (CA INDEX NAME)



●2 I^-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L4 ANSWER 17 OF 25 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1996:99334 CAPLUS
DOCUMENT NUMBER: 124:215765
ORIGINAL REFERENCE NO.: 124:39605a,39608a
TITLE: Photoprocesses in dimers of polymethine dyes
AUTHOR(S): Chibisov, A. K.; Zakharova, G. V.; Gorner, H.; Tolmachev, A. I.
CORPORATE SOURCE: Inst. Khim. Fiz. im. Semenova, Moscow, 117977, Russia
SOURCE: Zhurnal Prikladnoi Spektroskopii (1995), 62(2), 57-64
CODEN: ZPSBAX; ISSN: 0514-7506
PUBLISHER: Navuka i Tekhnika
DOCUMENT TYPE: Journal
LANGUAGE: Russian

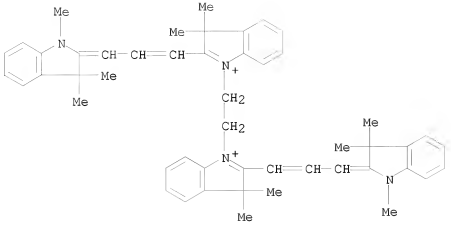
AB Deactivation processes are studied of excited singlet- and triplet states of monomeric indocarbocyanine (A-1) and bis-dyes which are linked by 2 and 4 methylene groups in one N, N'-chain (A-2 and A-3, resp.) and two chains (A-4 and A-5), as well as monomeric thiacarbocyanine (b-1) and bis-dyes linked by 3 and 6 methylene groups in one chain (B-2 and B-3). The quantum fluorescence yield ϕf in ethanol at room temperature is 0.02-0.07 and increases substantially with decreasing temperature The lowest value of ϕf is characteristic for A-4. Population and decay of the triplet state is observed in the presence and absence of sensitizers. For the cyclic bis-cyanines A-4 and A-5, where trans → cis-photoisomerization is hindered, the quantum yield of intersystem crossing approaches ϕisc .simeq. 0.1 and .simeq. 0.03, resp., and ϕisc is even smaller for other dyes. The characteristic features of the structure influencing the mechanism, i.e., the photochem. deactivation pathways of the excited trans isomers, are discussed.

IT 159504-48-0 159504-50-4 161521-77-3
161521-79-5
RL: PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)
(photochem. and photophys. processes in dimers of polymethine dyes)

RN 159504-48-0 CAPLUS
CN 3H-Indolium, 1,1'-(1,2-ethanediyl)bis[2-[3-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1-propenyl]-3,3-dimethyl-, bis[tetrafluoroborate(1-)] (9CI) (CA INDEX NAME)

CM 1

CRN 75805-06-0
CMF C50 H56 N4



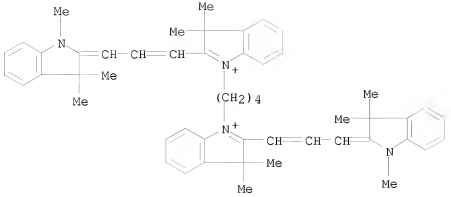
CM 2

CRN 14874-70-5
CMF B F4
CCI CCS

RN 159504-50-4 CAPLUS
CN 3H-Indolium, 1,1'-(1,4-butanediyl)bis[2-[3-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1-propenyl]-3,3-dimethyl-, bis[tetrafluoroborate(1-)] (9CI) (CA INDEX NAME)

CM 1

CRN 142817-63-8
CMF C52 H60 N4



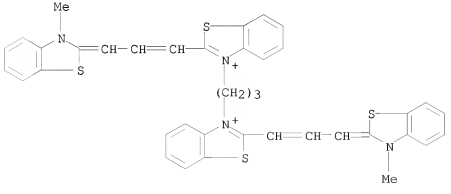
CM 2

CRN 14874-70-5
CMF B F4
CCI CCS

RN 161521-77-3 CAPLUS
CN Benzothiazolium, 3,3'-(1,3-propanediyl)bis[2-[3-(3-methyl-2(3H)-benzothiazolylidene)-1-propenyl]-, bis[tetrafluoroborate(1-)] (9CI) (CA INDEX NAME)

CM 1

CRN 161521-76-2
CMF C39 H34 N4 S4



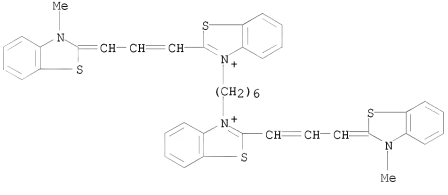
CM 2

CRN 14874-70-5
CMF B F4
CCI CCS

RN 161521-79-5 CAPLUS
CN Benzothiazolium, 3,3'-(1,6-hexanediyl)bis[2-[3-(3-methyl-2(3H)-benzothiazolylidene)-1-propenyl]-, bis[tetrafluoroborate(1-)] (9CI) (CA INDEX NAME)

CM 1

CRN 161521-78-4
CMF C42 H40 N4 S4



CM 2

CRN 14874-70-5
CMF B F4
CCI CCS

L4 ANSWER 18 OF 25 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1995:297982 CAPLUS
DOCUMENT NUMBER: 122:173979
ORIGINAL REFERENCE NO.: 122:31705a,31708a
TITLE: Photorelaxation Processes in Covalently Linked Indocarbocyanine and Thiacarbocyanine Dyes
AUTHOR(S): Chibisov, A. K.; Zakharova, G. V.; Goerner, H.; Sogulyaev, Yu. A.; Mushkalo, I. L.; Tolmachev, A. I.
CORPORATE SOURCE: N. N. Semenov Institute of Chemical Physics, Moscow, 117334, Russia
SOURCE: Journal of Physical Chemistry (1995), 99(3), 886-93
CODEN: JPCHAX; ISSN: 0022-3654
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

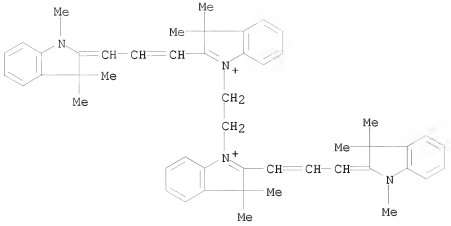
AB The photophys. and photochem. properties of monomeric thiacarbocyanine (B-1) and two bis-derivs. which are linked by three or six methylene groups in one N,N'-chain (B-2 and B-3, resp.) as well as of indocarbocyanine (A-1) and bis-derivs. which are linked by two and, resp., four methylene groups in one (A-2 and A-3) and two chains (A-4 and A-5) were studied in ethanol. The quantum yield of fluorescence at 297 K is Φf = 0.02-0.07 and increases substantially with decreasing temperature, the smallest change occurring for A-4, where intersystem crossing and internal conversion at the trans side are largest. Photobleaching contains two parts one from trans → cis photoisomerization and another from the T-T transition in the range of ground state absorption. Population and decay of the triplet state were observed in the presence and absence of sensitizers, the lifetime at room temperature being in the millisecond range. For the cyclic bis-cyanines A-4 and A-5, where trans → cis photoisomerization is hindered, the quantum yield of intersystem crossing approaches Φisc ≈ 0.1 and 0.03, resp., and Φisc is even smaller for the other dyes. The quantum yield of trans → cis photoisomerization is substantial for the monomers; for example, Φt→c = 0.25 for B-1 at 297 K and drops with decreasing temperature The smaller values for the single-chain bis-cyanines, e.g., Φt→c = 0.05 for A-2, are due to the reduced flexibility. The activation parameters for the thermal back-reaction are analyzed. The characteristic features of structure influencing the mechanism, i.e., the photochem. deactivation pathways of the excited trans isomers, are discussed.

IT 159504-48-0 159504-50-4 161521-77-3
161521-79-5
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)
(photorelaxation processes in covalently linked indocarbocyanine and thiacarbocyanine dyes)

RN 159504-48-0 CAPLUS
CN 3H-Indolium, 1,1'-(1,2-ethanediyl)bis[2-[3-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1-propenyl]-3,3-dimethyl-, bis[tetrafluoroborate(1-)] (9CI) (CA INDEX NAME)

CM 1

CRN 75805-06-0
CMF C50 H56 N4



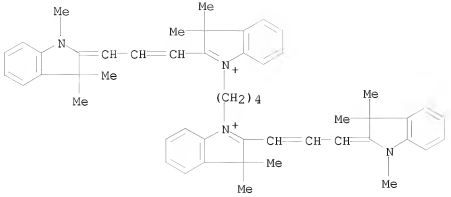
CM 2

CRN 14874-70-5
CMF B F4
CCI CCS

RN 159504-50-4 CAPLUS
CN 3H-Indolium, 1,1'-(1,4-butanediyl)bis[2-[3-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1-propenyl]-3,3-dimethyl-, bis[tetrafluoroborate(1-)] (9CI) (CA INDEX NAME)

CM 1

CRN 142817-63-8
CMF C52 H60 N4



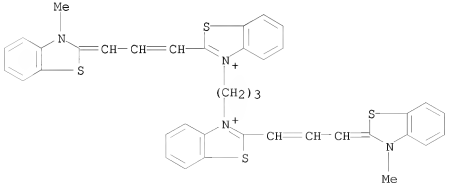
CM 2

CRN 14874-70-5
CMF B F4
CCI CCS

RN 161521-77-3 CAPLUS
CN Benzothiazolium, 3,3'-(1,3-propanediyl)bis[2-[3-(3-methyl-2(3H)-benzothiazolylidene)-1-propenyl]-, bis[tetrafluoroborate(1-)] (9CI) (CA INDEX NAME)

CM 1

CRN 161521-76-2
CMF C39 H34 N4 S4



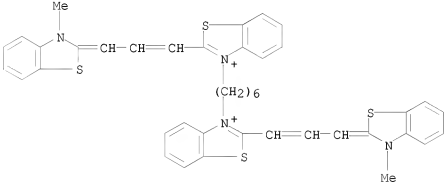
CM 2

CRN 14874-70-5
CMF B F4
CCI CCS

RN 161521-79-5 CAPLUS
CN Benzothiazolium, 3,3'-(1,6-hexanediyl)bis[2-[3-(3-methyl-2(3H)-benzothiazolylidene)-1-propenyl]-, bis[tetrafluoroborate(1-)] (9CI) (CA INDEX NAME)

CM 1

CRN 161521-78-4
CMF C42 H40 N4 S4



CM 2

CRN 14874-70-5
CMF B F4
CCI CCS

L4 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1995:139397 CAPLUS
DOCUMENT NUMBER: 122:19389
ORIGINAL REFERENCE NO.: 122:3767a,3770a
TITLE: Effect of nonconjugated chromophore interaction on the luminescence properties of bisindocarbocyanine dyes
AUTHOR(S): Ishchenko, A. A.; Mushkalo, I. L.; Sogulyaev, Yu. A.; Agafonova, G. A.; Ibraev, N. Kh.
CORPORATE SOURCE: Inst. Org. Khim., Kiev, 253660, Ukraine
SOURCE: Optika i Spektroskopiya (1994), 77(3), 398-401
CODEN: OPSPAM; ISSN: 0030-4034
DOCUMENT TYPE: Journal
LANGUAGE: Russian

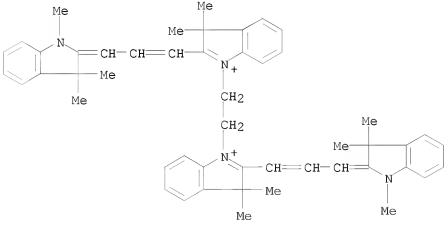
AB The deactivation path of electronically-excited states of chemical bonded dimers (bicyanines with 2 nonconjugated chromophores) were studied in addition to corresponding monomer dyes. The fluorescence quantum yield of the former are lower than the latter, and decrease with an increase in the degree of chromophore interaction (decreased length of the isolating polymethylene bridge). Based on the studied effect of an external heavy atom it is shown that decrease of the fluorescence of bicyanines is connected with enhancement of intercombination conversion in these mols.

IT 159504-48-0 159504-50-4 159504-52-6
159504-54-8
RL: PRP (Properties)
(effect of nonconjugated chromophore interaction on luminescence properties of bisindocarbocyanine dyes)

RN 159504-48-0 CAPLUS
CN 3H-Indolium, 1,1'-(1,2-ethanediyl)bis[2-[3-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1-propenyl]-3,3-dimethyl-, bis[tetrafluoroborate(1-)] (9CI) (CA INDEX NAME)

CM 1

CRN 75805-06-0
CMF C50 H56 N4



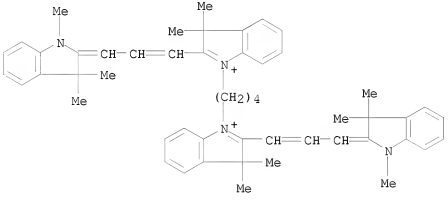
CM 2

CRN 14874-70-5
CMF B F4
CCI CCS

RN 159504-50-4 CAPLUS
CN 3H-Indolium, 1,1'-(1,4-butanediyl)bis[2-[3-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1-propenyl]-3,3-dimethyl-, bis[tetrafluoroborate(1-)] (9CI) (CA INDEX NAME)

CM 1

CRN 142817-63-8
CMF C52 H60 N4



CM 2

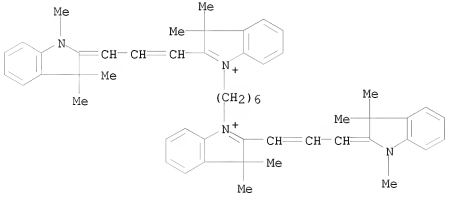
CRN 14874-70-5
CMF B F4
CCI CCS

RN 159504-52-6 CAPLUS

CN 3H-Indolium, 1,1'-(1,6-hexanediyl)bis[2-[3-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1-propenyl]-3,3-dimethyl-, bis[tetrafluoroborate(1-)] (9CI) (CA INDEX NAME)

CM 1

CRN 113545-08-7
CMF C54 H64 N4



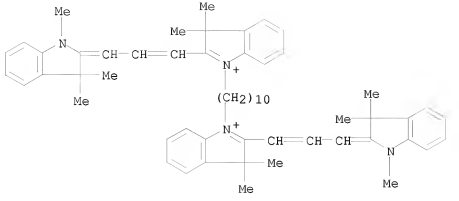
CM 2

CRN 14874-70-5
CMF B F4
CCI CCS

RN 159504-54-8 CAPLUS
CN 3H-Indolium, 1,1'-(1,10-decanediyl)bis[2-[3-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1-propenyl]-3,3-dimethyl-, bis[tetrafluoroborate(1-)] (9CI) (CA INDEX NAME)

CM 1

CRN 113545-10-1
CMF C58 H72 N4



CM 2

CRN 14874-70-5
CMF B F4
CCI CCS

L4 ANSWER 20 OF 25 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1992:492248 CAPLUS
DOCUMENT NUMBER: 117:92248
ORIGINAL REFERENCE NO.: 117:16085a,16088a
TITLE: Macrocyclic bisindocarbocyanines
AUTHOR(S): Mushkalo, I. L.; Sogulyaev, Yu. A.; Tolmachev, A. I.
CORPORATE SOURCE: Inst. Org. Khim., Kiev, Ukraine
SOURCE: Ukrainskii Khimicheskii Zhurnal (Russian Edition) (1991), 57(11), 1177-81
CODEN: UKZHAU; ISSN: 0041-6045
DOCUMENT TYPE: Journal
LANGUAGE: Russian
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Biscyanines I (n = 1, 2) and II having nonconjugated chromopores were prepared by reaction of tri-Et orthoformate with the corresponding salt III or IV at 130° in acetic anhydride–pyridine mixture and were characterized by elemental anal. and UV and NMR spectra. Contrary to biscyanines of similar structure having conjugated chromophores which give

2 intense absorption bands, I (n = 1) and II showed only one intense absorption band and a 2nd maximum of much lower extinction. I (n = 2) with tetramethylene bridges between chromophores had 2 absorption bands, but its short-wavelength absorption maximum had a 2-4 times higher extinction than the long-wavelength maximum, indicating that the chromophores are almost parallel.

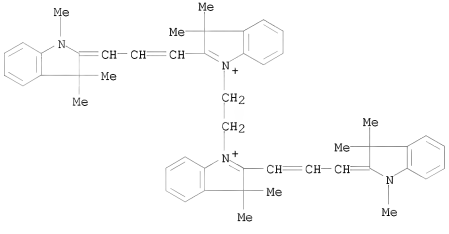
IT 113545-02-1 142817-64-9
RL: USES (Uses)
(dye, UV and NMR spectra of)

RN 113545-02-1 CAPLUS

CN 3H-Indolium, 1,1'-(1,2-ethanediyl)bis[2-[3-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1-propenyl]-3,3-dimethyl-, diperchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 75805-06-0
CMF C50 H56 N4



CM 2

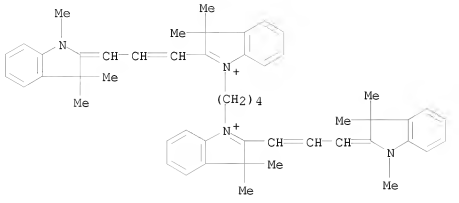
CRN 14797-73-0
CMF Cl O4

RN 142817-64-9 CAPLUS

CN 3H-Indolium, 1,1'-(1,4-butanediyl)bis[2-[3-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1-propenyl]-3,3-dimethyl-, diperchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 142817-63-8
CMF C52 H60 N4



CM 2

CRN 14797-73-0
CMF Cl O4

L4 ANSWER 21 OF 25 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1989:615959 CAPLUS
DOCUMENT NUMBER: 111:215959
ORIGINAL REFERENCE NO.: 111:35831a,35834a
TITLE: Spectroscopic manifestation of association of cyanine dyes containing nonconjugated chromophores in weakly polar solutions
AUTHOR(S): Ishchenko, A. A.; Mushkalo, I. L.; Derevyanko, N. A.; Zakhidov, U.; Khidirova, T. Sh.; Nizamov, N.
CORPORATE SOURCE: USSR
SOURCE: Zhurnal Prikladnoi Spektroskopii (1989), 50(5), 772-9
CODEN: ZPSBAX; ISSN: 0514-7506
DOCUMENT TYPE: Journal
LANGUAGE: Russian
GI For diagram(s), see printed CA Issue.
AB Biscyanine dyes (I-III) with nonconjugated chromophores associated more easily in weakly polar solns. than the corresponding cyanine dyes (IV-VI) with one chromophore. Such behavior was attributed to participation of both anions in association of ion pairs of the biscyanines. Sym. dyes not containing bulky substituents formed a sandwich of ion pairs, thus leading to

the appearance of new short-wavelength absorption bands and to fluorescence quenching. Sym. dyes with bulky substituents were characterized by long-wavelength absorption bands and luminescence, indicating formation of aggregates with an angle of 180° between the chromophores. Association of asym. cyanines was accompanied only by a decrease in the integral intensity of absorption and fluorescence.

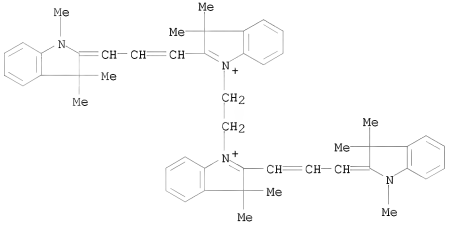
IT 113545-02-1
RL: PRP (Properties)
(association of, in weakly polar solution, spectroscopic manifestation of)

RN 113545-02-1 CAPLUS

CN 3H-Indolium, 1,1'-(1,2-ethanediyl)bis[2-[3-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1-propenyl]-3,3-dimethyl-, diperchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 75805-06-0
CMF C50 H56 N4



CM 2

CRN 14797-73-0
CMF Cl O4

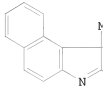
L4 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1989:573939 CAPLUS
DOCUMENT NUMBER: 111:173939
ORIGINAL REFERENCE NO.: 111:28975a,28978a

TITLE: Reaction products of benzannelated 2,3,3-trimethyl-3H-indoles with α,ω-dibromoalkanes, and cyanine dyes based on them

AUTHOR(S): Mushkalo, I. L.; Sogulyaev, Yu. A.; Turova, L. S.; Kolesnikov, A. M.
CORPORATE SOURCE: Inst. Org. Khim., Kiev, USSR

SOURCE: Ukrainskii Khimicheskii Zhurnal (Russian Edition) (1989), 55(3), 290-4
CODEN: UKZHAU; ISSN: 0041-6045
DOCUMENT TYPE: Journal
LANGUAGE: Russian
OTHER SOURCE(S): CASREACT 111:173939

GI



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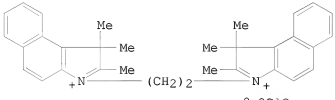

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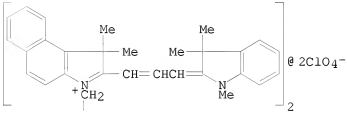


III

AB The title study can be illustrated by the reaction of benzindole derivative I with BrCH2CH2Br to give the diquaternary salt II, which is then converted to the cyanine dye III. The electronic spectra of III and 14 addnl. dyes are given.

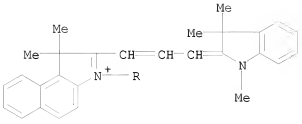
IT 123071-23-8P 123071-25-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

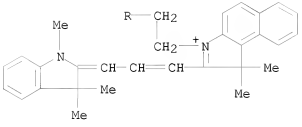
RN 123071-23-8 CAPLUS

CN 1H-Benz[e]indolium, 3,3'-(1,2-ethanediyl)bis[2-[3-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1-propenyl]-1,1-dimethyl-, diperchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 123071-22-7
CMF C58 H60 N4





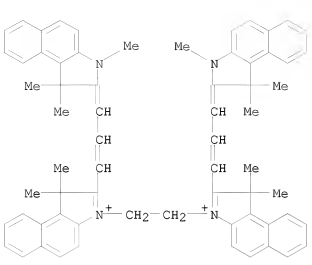
CM 2

CRN 14797-73-0
CMF Cl O4

RN 123071-25-0 CAPLUS
CN 1H-Benz[e]indolium, 3,3'-(1,2-ethanediyl)bis[2-[3-(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)-1-propenyl]-1,1-dimethyl-, diperchlorate (9CI) (CA INDEX NAME)

CM 1

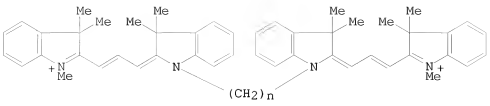
CRN 123071-24-9
CMF C66 H64 N4



CM 2

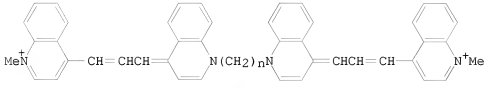
CRN 14797-73-0
CMF Cl O4

L4 ANSWER 23 OF 25 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1988:133386 CAPLUS
DOCUMENT NUMBER: 108:133386
ORIGINAL REFERENCE NO.: 108:21885a,21888a
TITLE: 1,1'-Polymethylenebis[carbocyanine] derivatives of the indole and quinoline series containing two symmetrical nonconjugated chromophores
AUTHOR(S): Mushkalo, I. L.; Sogulyaev, Yu. A.
CORPORATE SOURCE: Inst. Org. Khim., Kiev, USSR
SOURCE: Zhurnal Organicheskoi Khimii (1987), 23(10), 2212-16
CODEN: ZORKAE; ISSN: 0514-7492
DOCUMENT TYPE: Journal
LANGUAGE: Russian
GI



2X⁻

I



2ClO4⁻

II

AB The biscarbocyanine dyes I (n = 2-6, 10; X = ClO4, I, tosylate) and II (n = 2-6, 10) were prepared by condensation of 1,1'-polymethylenebis(2,3,3-trimethyl-3H-indolium) and -bis(4-methylquinolinium) salts with 2-(formylmethylene)-1,3,3-trimethyl-3H-indole and 4-(β-anilinovinyl)-1-methylquinolium p-toluenesulfonate, resp. All dyes had two strong absorption maximum in the visible region. The absorption maximum were in the range of 505-516 and 547-563 nm for I and 585-654 and 712-730 nm for II. Stronger chromophore interaction was observed for II than for I.

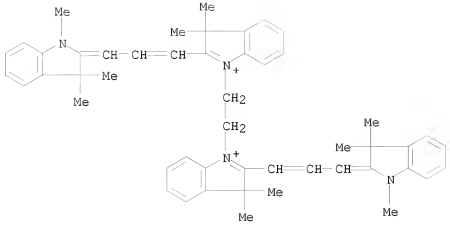
IT 113545-02-1P 113545-04-3P 113545-05-4P
113545-07-6P 113545-09-8P 113545-11-2P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and spectral properties of)

RN 113545-02-1 CAPLUS

CN 3H-Indolium, 1,1'-(1,2-ethanediyl)bis[2-[3-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1-propenyl]-3,3-dimethyl-, diperchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 75805-06-0
CMF C50 H56 N4



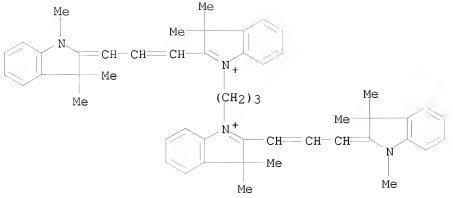
CM 2

CRN 14797-73-0
CMF Cl O4

RN 113545-04-3 CAPLUS
CN 3H-Indolium, 1,1'-(1,3-propanediyl)bis[2-[3-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1-propenyl]-3,3-dimethyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

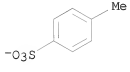
CM 1

CRN 113545-03-2
CMF C51 H58 N4

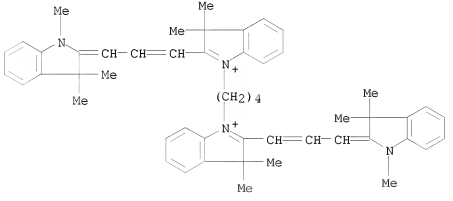


CM 2

CRN 16722-51-3
CMF C7 H7 O3 S



RN 113545-05-4 CAPLUS
CN 3H-Indolium, 1,1'-(1,4-butanediyl)bis[2-[3-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1-propenyl]-3,3-dimethyl-, diiodide (9CI) (CA INDEX NAME)

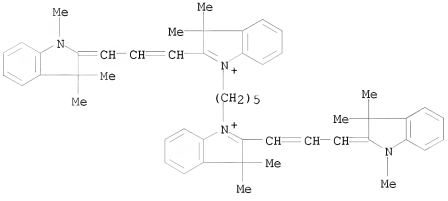


●2 I⁻

RN 113545-07-6 CAPLUS
CN 3H-Indolium, 1,1'-(1,5-pentanediyl)bis[2-[3-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1-propenyl]-3,3-dimethyl-, diperchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 113545-06-5
CMF C53 H62 N4



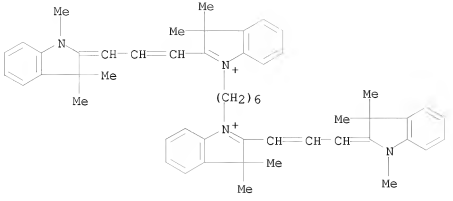
CM 2

CRN 14797-73-0
CMF Cl O4

RN 113545-09-8 CAPLUS
CN 3H-Indolium, 1,1'-(1,6-hexanediyl)bis[2-[3-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1-propenyl]-3,3-dimethyl-, diperchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 113545-08-7
CMF C54 H64 N4



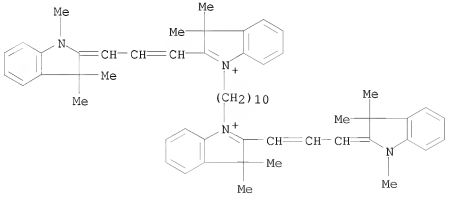
CM 2

CRN 14797-73-0
CMF Cl O4

RN 113545-11-2 CAPLUS
CN 3H-Indolium, 1,1'-(1,10-decanediyl)bis[2-[3-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1-propenyl]-3,3-dimethyl-, diperchlorate (9CI) (CA INDEX NAME)

CM 1

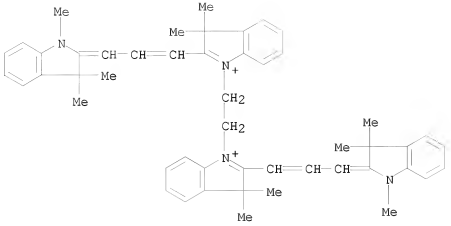
CRN 113545-10-1
CMF C58 H72 N4



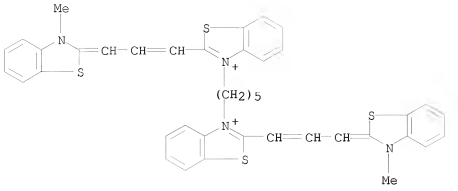
CM 2

CRN 14797-73-0
CMF Cl O4

L4 ANSWER 24 OF 25 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1981:32159 CAPLUS
DOCUMENT NUMBER: 94:32159
ORIGINAL REFERENCE NO.: 94:5297a,5300a
TITLE: A macrocyclic bis-cyanine dye
AUTHOR(S): Mushkalo, I. L.; Dyadyusha, G. G.; Turova, L. S.; Kornilov, M. Yu.
CORPORATE SOURCE: Inst. Org. Chem., Kiev, 252660, USSR
SOURCE: Tetrahedron Letters (1980), 21(31), 2977-80
CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB The bis(indocarbocyanine) dye [I; RR' = (CH2)2] [75805-04-8] was synthesized (7%) by cyanine condensation of II [75805-05-9] and its structure was determined by visible spectroscopy, based on the theory of chromophore interaction. The dye has a zero angle between the directions of the polymethine chromophores. The analogous dye (I; R = R1 = Me) [75805-06-0] with only 1 ethylene bridge was also prepared and its visible spectrum was determined
IT 75805-06-0P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and visible spectrum of, structure in relation to)
RN 75805-06-0 CAPLUS
CN 3H-Indolium, 1,1'-(1,2-ethanediyl)bis[2-[3-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1-propen-1-yl]-3,3-dimethyl- (CA INDEX NAME)



L4 ANSWER 25 OF 25 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1979:78823 CAPLUS
DOCUMENT NUMBER: 90:78823
ORIGINAL REFERENCE NO.: 90:12365a,12368a
TITLE: ESR in triplet states of acridine, cyanine and rhodamine dyes and their aggregates
AUTHOR(S): Schmidt, H.; Roedder, H.; Zellhofer, R.
CORPORATE SOURCE: Inst. Biophys. Chem. Biochem., Univ. Frankfurt, Frankfurt/Main, Fed. Rep. Ger.
SOURCE: Semiconductors and Insulators (1978), 4(3-4), 367-73
CODEN: SINSD4; ISSN: 0309-5991
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The dependence of the ESR spectra of some acridine, cyanine and rhodamine dyes in their lowest excited triplet states upon the concentration was investigated in aqueous MeOH solns. at 90 K. The different spectra are assigned to monomers, dimers and association polymers, in which the mols. are oriented in a translationally nonequivalent manner.
IT 69203-23-2
RL: PRP (Properties)
(ESR of, mol. association in relation to)
RN 69203-23-2 CAPLUS
CN Benzothiazolium, 3,3'-(1,5-pentanediyl)bis[2-[3-(3-methyl-2(3H)-benzothiazolylidene)-1-propenyl]- (9CI) (CA INDEX NAME)



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